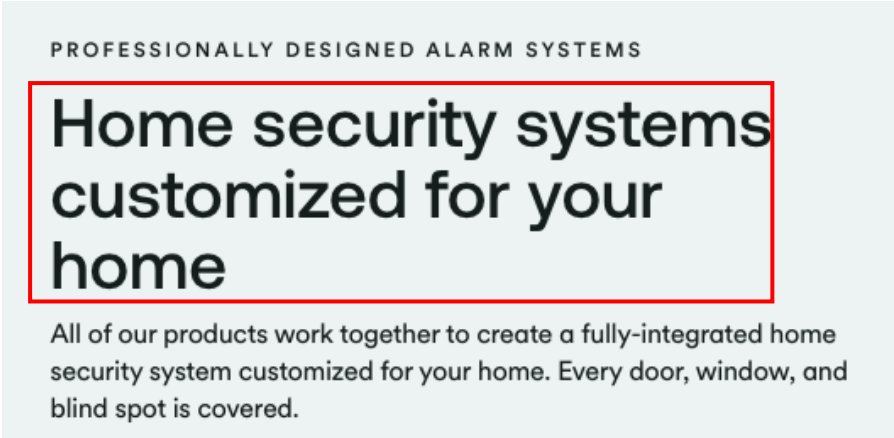


Complaint, Exhibit 4.

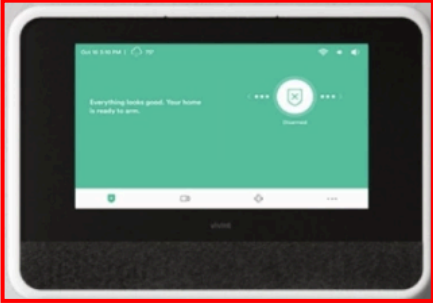
U.S. Patent No. US 9,300,723 v. Vivint Inc.
Claims 1, 6, 8, 9, 12, 17, 19, 20, 22, 27, 30, 32, 37, 39, 42, 47, 49, 50.

Complaint, Exhibit 4.

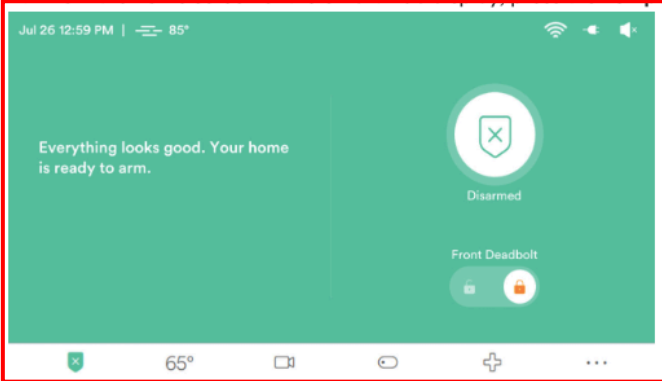
1. Claim Chart

| Claim | Analysis |
|-----------------------------------|---|
| [1.P] A media system, comprising: | <p>Vivint (“Company”) makes, uses, sells, and/or offers to sell a media system.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, Company offers a Home Security System that comprises a Smart Hub (“media system”) that allows users to watch live camera feeds, close the garage, lock and unlock doors, control a smart thermostat, or turn on an alarm system.</p>  <p>Source: https://www.vivint.com/packages/home-security</p> |

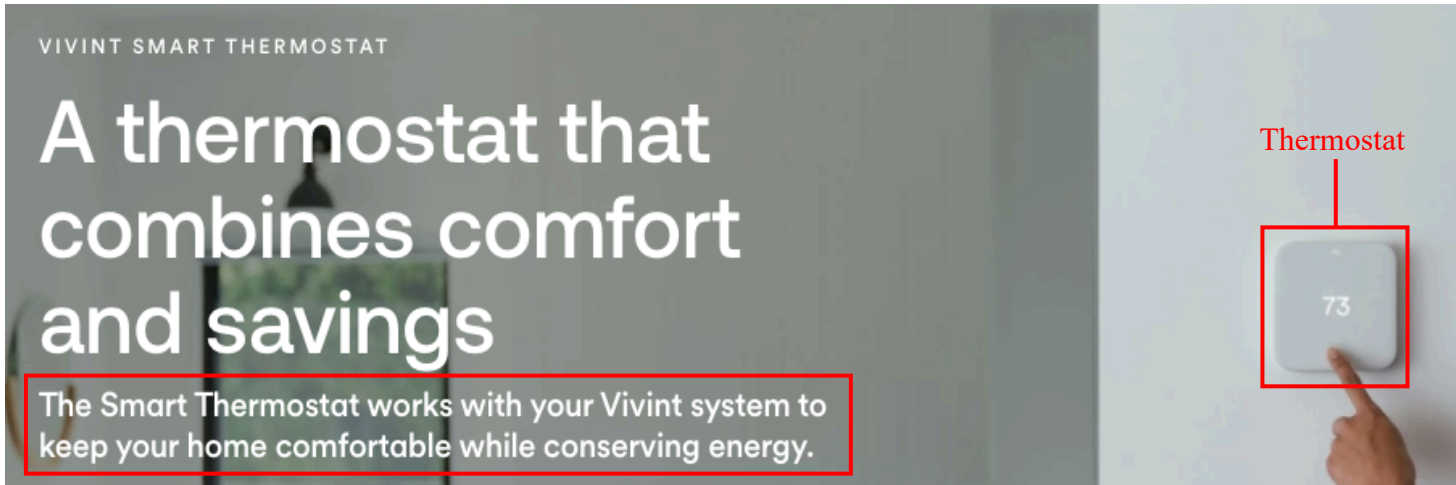
Complaint, Exhibit 4.

| | |
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| | <div data-bbox="426 300 682 321"><p>SMART HOME CONTROL</p></div> <div data-bbox="422 342 1029 503"><p>Vivint Smart Hub gives you complete control in your home</p></div> <div data-bbox="426 522 1045 578"><p>Watch live camera feeds, close the garage, lock and unlock your doors, or turn on your alarm system—right from the Smart Hub.</p></div> <div data-bbox="403 602 1182 638"><p>Source: https://www.vivint.com/packages/home-automation</p></div> <div data-bbox="453 703 840 730"><p>EXCLUSIVE TECHNOLOGY</p></div> <div data-bbox="453 769 1211 839"><p>One connected system</p></div> <div data-bbox="453 860 1327 899"><p>If your home security system isn't easy to use, you'll never use it.</p></div> <div data-bbox="453 904 1381 1109"><p>That's why all of our security and automation products like locks, cameras, lighting, and thermostats connect on a simple platform that you control from the <u>app or the hub</u>. And they work seamlessly with smart voice assistants like Amazon Alexa and Google Assistant.</p></div> <div data-bbox="403 1140 1142 1177"><p>Source: https://www.vivint.com/packages/home-security</p></div> <div data-bbox="1215 248 1948 602"></div> |
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Complaint, Exhibit 4.

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| | <p>Vivint Smart Hub - Adjust Thermostat</p> <p><i>How to adjust the thermostat temperature from the Smart Hub:</i></p> <p>1. From the home screen of the Smart Hub display, press the Temperature display icon on the bottom menu bar.</p>  <p>Source: https://support.vivint.com/article/Smart-Hub-Adjust-Thermostat (annotated)</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p> |
| <p>[1.1] at least one media terminal disposed in an accessible relation to at least one interactive computer network,</p> | <p>Company provides at least one media terminal disposed in an accessible relation to at least one interactive computer network.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, the smart thermostat is connected ("accessible relation") to the Vivint smart hub ("one media terminal") through the Z-wave smart home protocol ("at least one interactive computer network").</p> |

Complaint, Exhibit 4.

| | |
|----------------------|---|
| | <div data-bbox="409 250 1856 732">  </div> <p>Source: https://www.vivint.com/products/smart-thermostat (annotated)</p> <p>Specs</p> <p>Color: White Size: 4.5" h x 4.5" w x 0.9" d Weight: 10.1 oz (with batteries) Power: 4 AA batteries or 24V AC wired from HVAC system Screen: On-screen control Sensors: Temperature, humidity, proximity, and ambient light Supported Fuels: Natural gas, propane, electric, fuel oil, and geothermal Compatibility: Works with conventional forced air, radiant, and heat pump, with up to 3 stages of heating and up to 2 stages of cooling Connectivity: Z-Wave</p> <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p> |
| [1.2] wireless range | a Company provides a wireless range structured to permit authorized access to said at least one interactive computer network. |

Complaint, Exhibit 4.

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| <p>structured to permit authorized access to said at least one interactive computer network,</p> | <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, to pair the thermostat device with the smart hub, the thermostat device must be within the range of 100 meters (“a wireless range”) of the Z-wave protocol. Further, Z-Wave network and devices in the Z-wave network are identified with their respective unique IDs. The unique IDs prevents unauthorized devices to access the Z-wave network. Therefore, upon information and belief, the thermostat devices that are within the wireless range of the Z-wave protocol are structured to permit authorized access to pair with the smart hub.</p> <div style="border: 2px solid red; padding: 10px; margin: 10px 0;"> <p>While Z-Wave has a range of 100 meters or 328 feet in open air, building materials reduce that range, it is recommended to have a Z-Wave device roughly every 30 feet, or closer for maximum efficiency. The Z-Wave signal can hop roughly 600 feet, and Z-Wave networks can be linked together for even larger deployments. Each Z-Wave network can support up to 232 Z-Wave devices allowing you the flexibility to add as many devices as you’d like to make sure your Smart Home is working it’s hardest.</p> </div> <p>Source: https://www.z-wave.com/learn</p> <p>In terms of identification and authorization, each Z-Wave network is identified by a network ID and each end device is identified with a node ID. The unique network ID prevents, for example, one Z-Wave-equipped house from controlling devices in another similarly equipped house.</p> <p>Source: https://www.techtarget.com/iotagenda/definition/Z-Wave</p> <p>Further, to the extent this element is performed at least in part by Defendant’s software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p> |
| <p>[1.3] at least one media node</p> | <p>Company provides at least one media node disposable within said wireless range, wherein said at least one media node is detectable by said at least one media terminal.</p> |

Complaint, Exhibit 4.

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| <p>disposable within said wireless range, wherein said at least one media node is detectable by said at least one media terminal,</p> | <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, the smart hub is paired to the thermostat (“one media node”) when it is located within the range of the Z-Wave protocol (“disposable within said wireless range”). Further, during pairing, the smart hub searches for the nearby thermostat devices to get paired (“one media node is detectable by said at least one media terminal”).</p> <p>Pair a thermostat to the panel/hub: — Media terminal</p> <ol style="list-style-type: none"> 1. Unlock the unit's Installer Toolbox from the Site Manager software. 2. From the panel/hub home screen, select the menu icon (...) then Software Version. 3. Use the 4-digit code that appeared in Site Manager after unlocking the Installer Toolbox. 4. Select Smart Home Devices. 5. Select Z-Wave. 6. Select Add Node. 7. On the thermostat, hold the Vivint Smart Thermostat's side button down for about 6-10 seconds (there is a screen that will pop up after 2 seconds, the second Installer screen will pop up at about 6 seconds). 8. Go down to Installer. 9. Select Network. 10. Select Connect. <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat (annotated)</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p> |
| <p>[1.4] at least one digital media file initially disposed on at least one of said at least one media terminal or</p> | <p>Company provides at least one digital media file initially disposed on at least one of said at least one media terminal or said at least one media node, said at least one media terminal being structured to detect said at least one media node disposed within said wireless range.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, to pair the thermostat to the smart hub, ‘smart home devices’ settings followed by “Z-wave” and “Add Node” settings are selected on the hub to pair with the thermostat. Further, when the thermostat's side button is held for 6 seconds, it starts searching (“said at least one media terminal being structured to detect said at least one media node”)</p> |

Complaint, Exhibit 4.

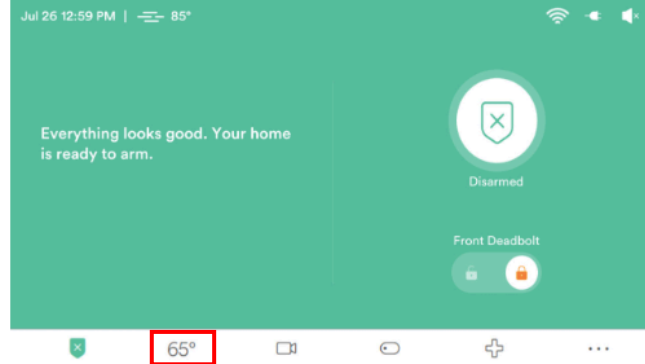
| | |
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| <p>said at least one media node, said at least one media terminal being structured to detect said at least one media node disposed within said wireless range,</p> | <p>for the Z-wave network, and upon clicking the Connect button for the searched network, the thermostat is paired with the smart hub.</p> <p>Furthermore, once the thermostat is connected to the smart hub, the smart hub allows users to control the thermostat by providing various functionalities on the smart hub such as changing room temperature, selecting different modes, and adjusting heating types. Therefore, it would be apparent to a person having ordinary skill in the art that the smart hub stores the settings to adjust the temperature on the thermostat.</p> <p>Pair a thermostat to the panel/hub:</p> <ol style="list-style-type: none"> 1. Unlock the unit's Installer Toolbox from the Site Manager software. 2. From the panel/hub home screen, select the menu icon (...) then Software Version. 3. Use the 4-digit code that appeared in Site Manager after unlocking the Installer Toolbox. 4. Select Smart Home Devices. 5. Select Z-Wave. 6. Select Add Node. 7. On the thermostat, hold the Vivint Smart Thermostat's side button down for about 6-10 seconds (there is a screen that will pop up after 2 seconds, the second Installer screen will pop up at about 6 seconds). 8. Go down to Installer. 9. Select Network. 10. Select Connect. <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat</p> |
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Complaint, Exhibit 4.

Vivint Smart Hub - Adjust Thermostat

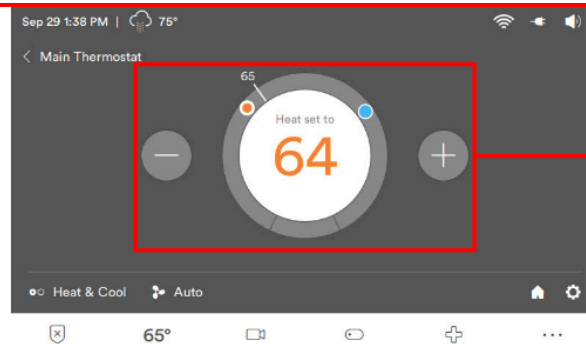
How to adjust the thermostat temperature from the Smart Hub:

1. From the home screen of the Smart Hub display, press the **Temperature** display icon on the bottom menu bar.



Source: <https://support.vivint.com/article/Smart-Hub-Adjust-Thermostat>

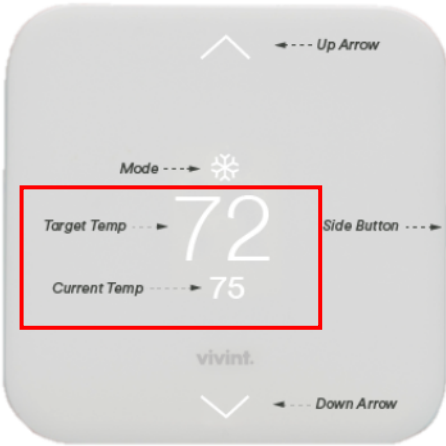
2. The temperature the thermostat is heating or cooling to will be displayed in the center. The current temperature in the home will be the smaller number on the edge of the circle. If you have more than one thermostat you will need to select the thermostat you want to adjust before you can change any settings.



Adjust Temperature

3. If the thermostat mode in the lower left corner is set to **Heat and Cool** you will need to tap on the orange or blue dot to change their temperature settings using the **Plus (+)** and **Minus (-)** icons.

Complaint, Exhibit 4.

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| | <p>Source: https://support.vivint.com/article/Smart-Hub-Adjust-Thermostat (annotated)</p>  <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p> |
| <p>[1.5] a communication link structured to dispose said at least one media terminal and said at least one media node in a communicative relation</p> | <p>Company provides a communication link structured to dispose said at least one media terminal and said at least one media node in a communicative relation with one another via said at least one interactive computer network, where said communication link being initiated by said at least one media terminal.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, to pair the thermostat to the smart hub, 'smart home devices' settings are selected on the hub. Further, "Z-wave" and "Add Node" settings are selected to pair with the thermostat ("said communication link being initiated by said at least one media terminal"). Further, when the pairing process is complete, a link ("communicative relation") is established between the thermostat and the smart hub via Z-wave protocol ("said at least one interactive computer network") such that the user adjusts the temperature on the thermostat via the smart hub.</p> |

Complaint, Exhibit 4.

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said at least
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said at least
one media
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One of the biggest benefits of smart home protocols is they can connect seamlessly to your mobile device or a central control panel like the [Vivint Smart Hub](#).

This means you can use your smartphone or smart hub to do things like arm your security system, adjust the room's temperature, or lock the doors.

Below are some of the most popular smart home protocols:

- Z-Wave

Source: <https://www.vivint.com/resources/article/smart-home-technologies-guide>

Smart home hub

Think of a smart hub as the heart of your house — it connects all smart devices to create the right home automation experience.

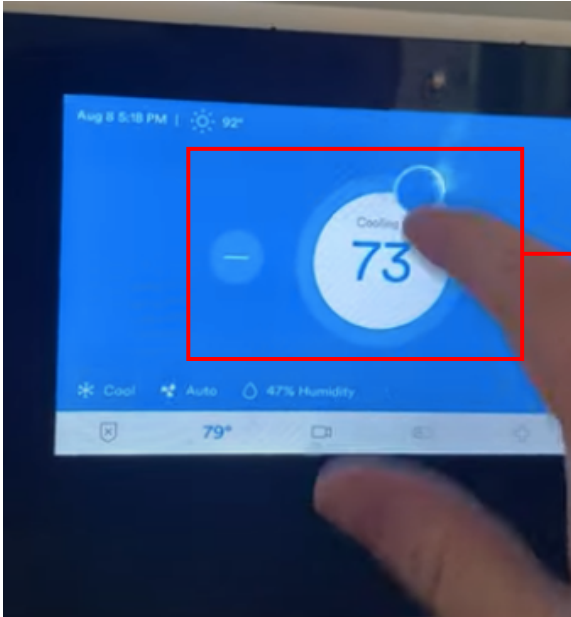
Through the [Vivint Smart Hub](#), you can control your door locks, view real-time camera footage of your home, and adjust the temperature — all through a single control panel.

Source: <https://www.vivint.com/resources/article/smart-home-technologies-guide>

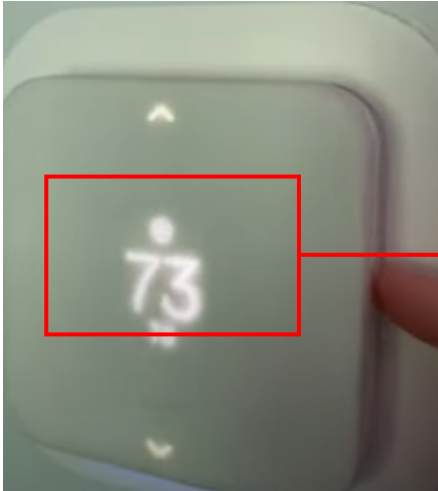
Pair a thermostat to the panel/hub:

1. Unlock the unit's Installer Toolbox from the Site Manager software.
2. From the panel/hub home screen, select the menu icon (...) then **Software Version**.
3. Use the 4-digit code that appeared in Site Manager after unlocking the Installer Toolbox.
4. Select **Smart Home Devices**.
5. Select **Z-Wave**.
6. Select **Add Node**.
7. On the thermostat, hold the Vivint Smart Thermostat's side button down for about 6-10 seconds (there is a screen that will pop up after 2 seconds, the second Installer screen will pop up at about 6 seconds).
8. Go down to **Installer**.
9. Select **Network**.
10. Select **Connect**.

Complaint, Exhibit 4.

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| | <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p> |
| <p>[1.6] said at least one media node and said at least one media terminal being structured to transmit said at least one digital media file therebetween via said communication link, and</p> | <p>Company provides at least one media node and said at least one media terminal being structured to transmit said at least one digital media file therebetween via said communication link.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, after the pairing process is complete, the smart hub allows the users to adjust the temperature settings for the thermostat directly from the smart hub. When the user modifies the room temperature using the smart hub, the adjusted temperature is reflected on the connected thermostat device as the target temperature. Therefore, it would be apparent to a person having ordinary skill in the art that the modified temperature instruction ("digital media file") is transmitted from the smart hub to the thermostat via the established link.</p> <div data-bbox="411 808 978 1421">  </div> <p>User adjusting temperature to 73° F via smart hub</p> |

Complaint, Exhibit 4.

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| | <p>Source: https://www.youtube.com/watch?v=NT36UmzH1A0, at 0:10 (annotated)</p> <div data-bbox="411 326 846 813">  </div> <p>Modified temperature (73° F) being displayed on thermostat device</p> <p>Source: https://www.youtube.com/watch?v=NT36UmzH1A0, at 0:57 (annotated)</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p> |
| <p>[1.7] said communication link is structured to bypass at least one media terminal security measure for a limited permissible</p> | <p>Company provides a media system, wherein said communication link is structured to bypass at least one media terminal security measure for a limited permissible use of the communication link by the media node to only transferring the at least one digital media file to, and displaying the at least one digital media file on, the at least one media terminal.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, once the devices are paired, a link is established between them, enabling the users to adjust the thermostat's temperature settings directly from the smart hub without the need to regularly pair the devices. As pairing is not necessary each time to make temperature adjustments via the smart hub, it would be apparent to a person having ordinary skill in the art that the established communication link is designed to bypass security measures related to the smart hub. Additionally, the adjusted temperature is reflected on the smart hub as the target temperature ("displaying the at least one digital media file on, the at least one media terminal").</p> |

Complaint, Exhibit 4.

use of the communication link by the media node to only transferring the at least one digital media file to, and displaying the at least one digital media file on, the at least one media terminal.

Pair a thermostat to the panel/hub:

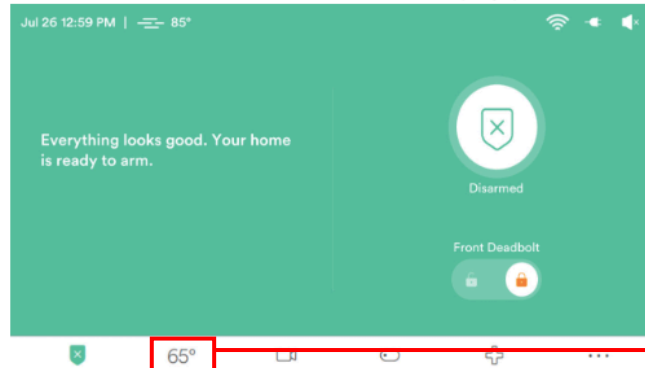
1. Unlock the unit's Installer Toolbox from the Site Manager software.
2. From the panel/hub home screen, select the menu icon (...) then **Software Version**.
3. Use the 4-digit code that appeared in Site Manager after unlocking the Installer Toolbox.
4. Select **Smart Home Devices**.
5. Select **Z-Wave**.
6. Select **Add Node**.
7. On the thermostat, hold the Vivint Smart Thermostat's side button down for about 6-10 seconds (there is a screen that will pop up after 2 seconds, the second Installer screen will pop up at about 6 seconds).

Source: <https://support.vivint.com/article/Smart-Properties-Element-Thermostat>

Vivint Smart Hub - Adjust Thermostat

How to adjust the thermostat temperature from the Smart Hub:

1. From the home screen of the Smart Hub display, press the **Temperature** display icon on the bottom menu bar.



displaying the at least one digital media file on, the at least one media terminal

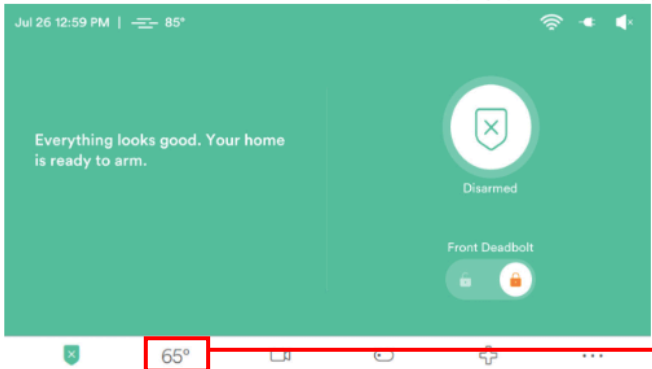
Source: <https://support.vivint.com/article/Smart-Hub-Adjust-Thermostat> (annotated)

Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.

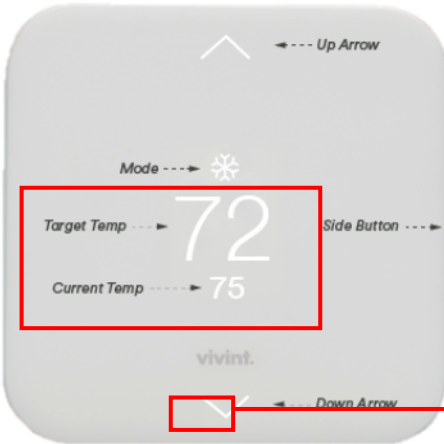
Complaint, Exhibit 4.

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| <p>[6] The system of claim 1, wherein the communication link is at least one of a peer-to-peer connection, bluetooth connection, and a WiFi connection.</p> | <p>Company provides the system of claim 1, wherein the communication link is at least one of a peer-to-peer connection, bluetooth connection, and a WiFi connection.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, the smart home devices such as the thermostat communicates wirelessly with the smart hub using Z-Wave protocol ('peer-to-peer connection').</p> <p>Specs</p> <p>Color: White</p> <p>Size: 4.5" h x 4.5" w x 0.9" d</p> <p>Weight: 10.1 oz (with batteries)</p> <p>Power: 4 AA batteries or 24V AC wired from HVAC system</p> <p>Screen: On-screen control</p> <p>Sensors: Temperature, humidity, proximity, and ambient light</p> <p>Supported Fuels: Natural gas, propane, electric, fuel oil, and geothermal</p> <p>Compatibility: Works with conventional forced air, radiant, and heat pump, with up to 3 stages of heating and up to 2 stages of cooling</p> <p>Connectivity: Z-Wave Peer-to-peer connection</p> <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat (annotated)</p> <p>Pair a thermostat to the panel/hub:</p> <ol style="list-style-type: none"> 1. Unlock the unit's Installer Toolbox from the Site Manager software. 2. From the panel/hub home screen, select the menu icon (...) then Software Version. 3. Use the 4-digit code that appeared in Site Manager after unlocking the Installer Toolbox. 4. Select Smart Home Devices. 5. Select Z-Wave. 6. Select Add Node. 7. On the thermostat, hold the Vivint Smart Thermostat's side button down for about 6-10 seconds (there is a screen that will pop up after 2 seconds, the second Installer screen will pop up at about 6 seconds). <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat</p> |
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Complaint, Exhibit 4.

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| | Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company |
| <p>[8] The system of claim 1, further comprising presenting the at least one digital media file on a display.</p> | <p>Company provides the system of claim 1, further comprising presenting the at least one digital media file on a display.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, the adjusted temperature reading is reflected on the smart hub ("presenting the at least one digital media file on a display").</p> <h3>Vivint Smart Hub - Adjust Thermostat</h3> <p><i>How to adjust the thermostat temperature from the Smart Hub:</i></p> <ol style="list-style-type: none"> 1. From the home screen of the Smart Hub display, press the Temperature display icon on the bottom menu bar.  <p>Source: https://support.vivint.com/article/Smart-Hub-Adjust-Thermostat (annotated)</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company</p> |
| <p>[9] The system of claim 1,</p> | <p>Company provides the system of claim 1, wherein the at least one digital media file is provided by the at least one media node.</p> |

Complaint, Exhibit 4.

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| <p>wherein the at least one digital media file is provided by the at least one media node.</p> | <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, the thermostat provides features to adjust the temperature. Therefore, it would be apparent to a person having ordinary skill in the art that the digital media file is provided by the media node.</p>  <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company</p> |
| <p>[12] A media system configured to receive a media file from a wireless mobile device over communication</p> | <p>Vivint ("Company") makes, uses, sells and/or offers to sell a media system configured to receive a media file from a wireless mobile device over communication network.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, Company offers a Home security system which comprises a Smart Hub ("media system") which is further paired with smart devices such as door locks, security camera and, thermostat ("wireless mobile device") via Z-Wave Technology ("communication network"). Since the smart hub and the thermostat are fully integrated, therefore, the reading on/measured by the thermostat ("media file") is reflected ("configured to receive") on the smart hub.</p> |

Complaint, Exhibit 4.

on network,
comprising:

PROFESSIONALLY DESIGNED ALARM SYSTEMS

Home security systems customized for your home

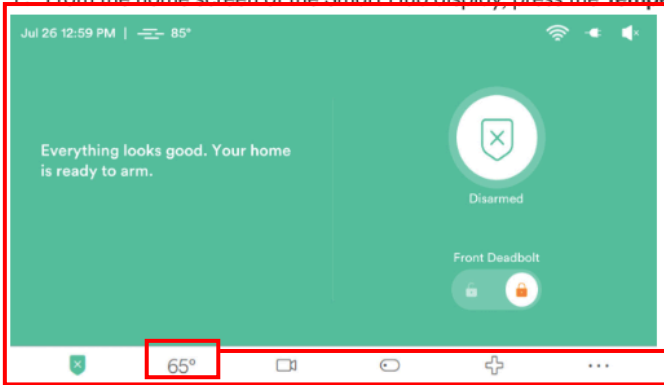
All of our products work together to create a fully-integrated home security system customized for your home. Every door, window, and blind spot is covered.

Source: <https://www.vivint.com/packages/home-security>

Vivint Smart Hub - Adjust Thermostat

How to adjust the thermostat temperature from the Smart Hub:

1. From the home screen of the Smart Hub display, press the **Temperature** display icon on the bottom menu bar.

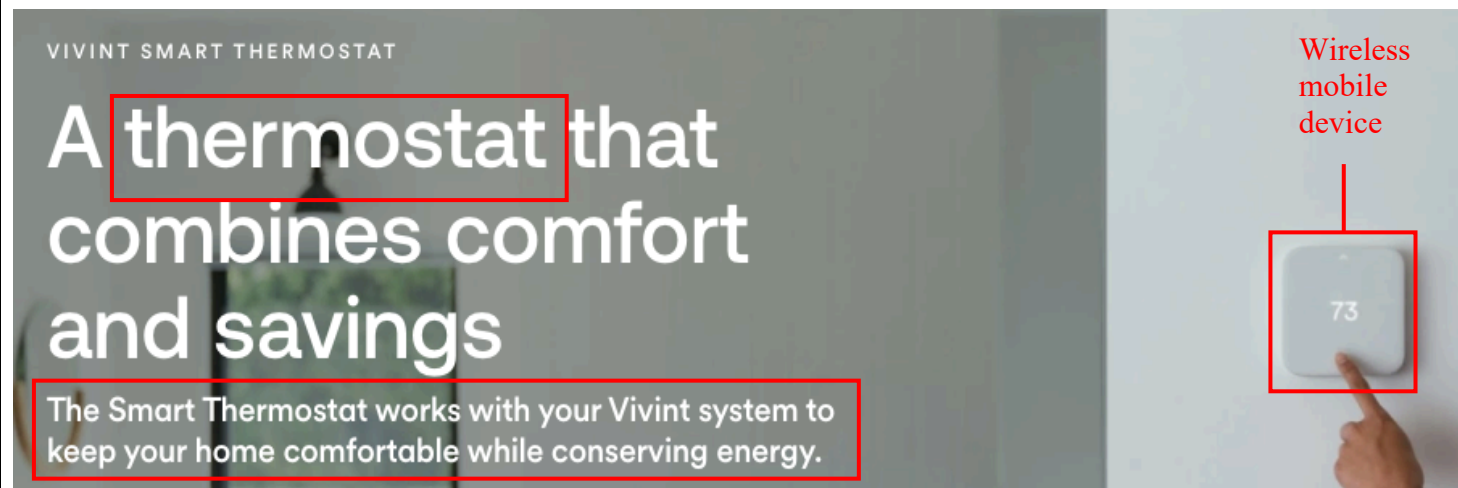


Media System

Thermostat reading reflected on the smart hub

Source: <https://support.vivint.com/article/Smart-Hub-Adjust-Thermostat> (annotated)

Complaint, Exhibit 4.



Source: <https://www.vivint.com/products/smart-thermostat> (annotated)

Specs

Color: White

Size: 4.5" h x 4.5" w x 0.9" d

Weight: 10.1 oz (with batteries)

Power: 4 AA batteries or 24V AC wired from HVAC system

Screen: On-screen control

Sensors: Temperature, humidity, proximity, and ambient light

Supported Fuels: Natural gas, propane, electric, fuel oil, and geothermal

Compatibility: Works with conventional forced air, radiant, and heat pump, with up to 3 stages of heating and up to 2 stages of cooling

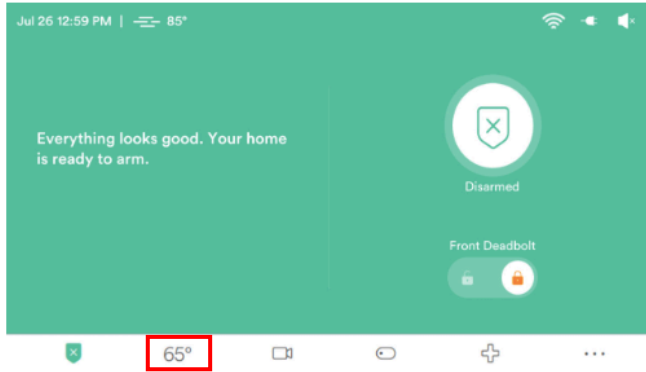
Connectivity: Z-Wave

Source: <https://support.vivint.com/article/Smart-Properties-Element-Thermostat>

What is a smart thermostat?

A smart thermostat, like the Vivint Smart Thermostat, uses built-in features like GPS, in-home sensors, and your personal preferences to automatically adjust your home's temperature. It also integrates with your smart home technology, allowing you to control your temperature from anywhere.

Complaint, Exhibit 4.

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| | | <p>Source: https://www.vivint.com/products/smart-thermostat</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p> |
| [12.1] wireless receiver; | a | <p>Company provides a wireless receiver.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, the reading on/measured by the thermostat is reflected on the smart hub via Z-Wave network. Therefore, it would be apparent to a person having ordinary skill in the art that a wireless receiver is embedded inside the smart hub.</p> <p>Vivint Smart Hub - Adjust Thermostat</p> <p><i>How to adjust the thermostat temperature from the Smart Hub:</i></p> <p>1. From the home screen of the Smart Hub display, press the Temperature display icon on the bottom menu bar.</p>  <p>Source: https://support.vivint.com/article/Smart-Hub-Adjust-Thermostat</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p> |

Complaint, Exhibit 4.

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| <p>[12.2] a security measure; and</p> | <p>Company provides a security measure.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, to pair the thermostat and the smart hub, ‘smart home devices’ settings followed by “Z-wave” and “Add Node” settings are selected on the hub to pair with the thermostat. Further, when the thermostat’s side button is held for 6 seconds, it becomes detectable for the Z-wave network, and upon clicking the Connect button for the searched network, the thermostat is paired with the smart hub. Therefore, the pairing procedure between the smart hub and the thermostat indicates a presence of a security measure.</p> <p>Pair a thermostat to the panel/hub:</p> <ol style="list-style-type: none"> 1. Unlock the unit’s Installer Toolbox from the Site Manager software. 2. From the panel/hub home screen, select the menu icon (...) then Software Version. 3. Use the 4-digit code that appeared in Site Manager after unlocking the Installer Toolbox. 4. Select Smart Home Devices. 5. Select Z-Wave. 6. Select Add Node. 7. On the thermostat, hold the Vivint Smart Thermostat’s side button down for about 6-10 seconds (there is a screen that will pop up after 2 seconds, the second Installer screen will pop up at about 6 seconds). 8. Go down to Installer. 9. Select Network. 10. Select Connect. <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat</p> <p>Further, to the extent this element is performed at least in part by Defendant’s software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p> |
| <p>[12.3] the media system disposed in an accessible relation to at</p> | <p>Company provides the media system disposed in an accessible relation to at least one interactive computer network that has a wireless range structured to permit authorized access to said at least one interactive computer network.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> |

Complaint, Exhibit 4.

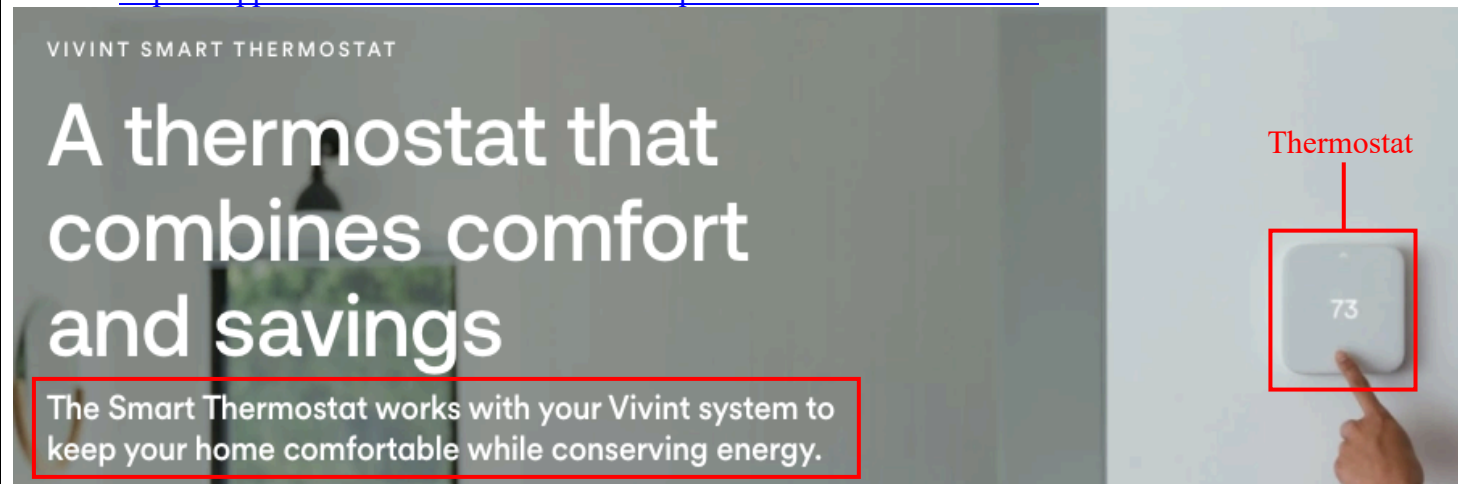
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| <p>least one interactive computer network that has a wireless range structured to permit authorized access to said at least one interactive computer network,</p> | <p>For example, to pair (“accessible relation”) the smart hub and the thermostat, the devices must be within a range of 100 meters (“a wireless range structured to permit authorized access”) of the Z-wave protocol (“computer network”). Further, Z-Wave network and devices in the Z-wave network are identified with their respective unique IDs. The unique IDs prevents unauthorized devices to access the Z-wave network. Therefore, upon information and belief, the thermostat devices that are within the wireless range of the Z-wave protocol are structured to permit authorized access to pair with the smart hub.</p> <div style="border: 2px solid red; padding: 10px; margin: 10px 0;"> <p>While Z-Wave has a range of 100 meters or 328 feet in open air, building materials reduce that range, it is recommended to have a Z-Wave device roughly every 30 feet, or closer for maximum efficiency. The Z-Wave signal can hop roughly 600 feet, and Z-Wave networks can be linked together for even larger</p> </div> <p>deployments. Each Z-Wave network can support up to 232 Z-Wave devices allowing you the flexibility to add as many devices as you’d like to make sure your Smart Home is working it’s hardest.</p> <p>Source: https://www.z-wave.com/learn</p> <p>In terms of identification and authorization, each Z-Wave network is identified by a network ID and each end device is identified with a node ID. The unique network ID prevents, for example, one Z-Wave-equipped house from controlling devices in another similarly equipped house.</p> <p>Source: https://www.techtarget.com/iotagenda/definition/Z-Wave</p> |
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Complaint, Exhibit 4.

Pair a thermostat to the panel/hub: — Media system

1. Unlock the unit's Installer Toolbox from the Site Manager software.
2. From the panel/hub home screen, select the menu icon (...) then **Software Version**.
3. Use the 4-digit code that appeared in Site Manager after unlocking the Installer Toolbox.
4. Select **Smart Home Devices**.
5. Select **Z-Wave**.
6. Select **Add Node**.
7. On the thermostat, hold the Vivint Smart Thermostat's side button down for about 6-10 seconds (there is a screen that will pop up after 2 seconds, the second Installer screen will pop up at about 6 seconds).
8. Go down to **Installer**.
9. Select **Network**.
10. Select **Connect**.

Source: <https://support.vivint.com/article/Smart-Properties-Element-Thermostat>



Source: <https://www.vivint.com/products/smart-thermostat> (annotated)

Complaint, Exhibit 4.

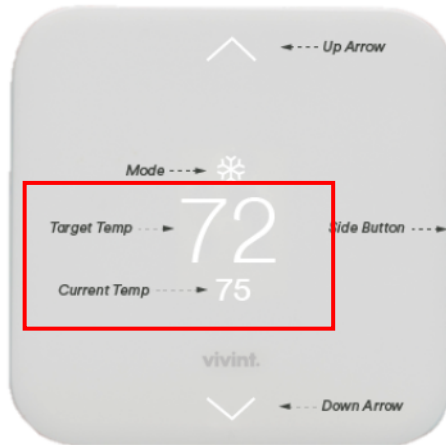
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| | <p>Specs</p> <p>Color: White</p> <p>Size: 4.5" h x 4.5" w x 0.9" d</p> <p>Weight: 10.1 oz (with batteries)</p> <p>Power: 4 AA batteries or 24V AC wired from HVAC system</p> <p>Screen: On-screen control</p> <p>Sensors: Temperature, humidity, proximity, and ambient light</p> <p>Supported Fuels: Natural gas, propane, electric, fuel oil, and geothermal</p> <p>Compatibility: Works with conventional forced air, radiant, and heat pump, with up to 3 stages of heating and up to 2 stages of cooling</p> <p>Connectivity: Z-Wave</p> <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p> |
| <p>[12.4] the wireless mobile device within said wireless range, wherein said wireless mobile device is detectable by said media system,</p> | <p>Company provides the wireless mobile device within said wireless range, wherein said wireless mobile device is detectable by said media system.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, on the smart hub, 'smart home devices' settings followed by "Z-wave" and "Add Node" settings are selected on the hub to pair with the thermostat ("the wireless mobile device"). Further, the thermostat's side button is held for 6 seconds to make it detectable for pairing with the hub ("said wireless mobile device is detectable by said media system").</p> |

Complaint, Exhibit 4.

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| | <p>Pair a thermostat to the panel/hub: — Media system</p> <ol style="list-style-type: none"> 1. Unlock the unit's Installer Toolbox from the Site Manager software. — Wireless mobile Device 2. From the panel/hub home screen, select the menu icon (...) then Software Version. 3. Use the 4-digit code that appeared in Site Manager after unlocking the Installer Toolbox. 4. Select Smart Home Devices. 5. Select Z-Wave. 6. Select Add Node. 7. On the thermostat, hold the Vivint Smart Thermostat's side button down for about 6-10 seconds (there is a screen that will pop up after 2 seconds, the second Installer screen will pop up at about 6 seconds). 8. Go down to Installer. 9. Select Network. 10. Select Connect. <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p> |
| <p>[12.5] at least one digital media file initially disposed on the wireless mobile device, said media system being structured to detect said wireless mobile</p> | <p>Company provides a system wherein at least one digital media file initially disposed on the wireless mobile device, said media system being structured to detect said wireless mobile device disposed within said wireless range.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, the thermostat displays a current temperature and a target temperature ("digital media file initially disposed on the wireless mobile device") and the same reading is reflected on the smart hub.</p> <p>Further, to pair the thermostat and the smart hub, 'smart home devices' settings followed by "Z-wave" and "Add Node" settings are selected on the hub to pair with the thermostat. Furthermore, when the thermostat's side button is held for 6 seconds, it becomes detectable for the Z-wave network ("said media system being structured to detect said wireless mobile device within said wireless range"), and upon clicking the Connect button for the searched network, the thermostat is paired with the smart hub.</p> |

Complaint, Exhibit 4.

device
disposed
within said
wireless
range,

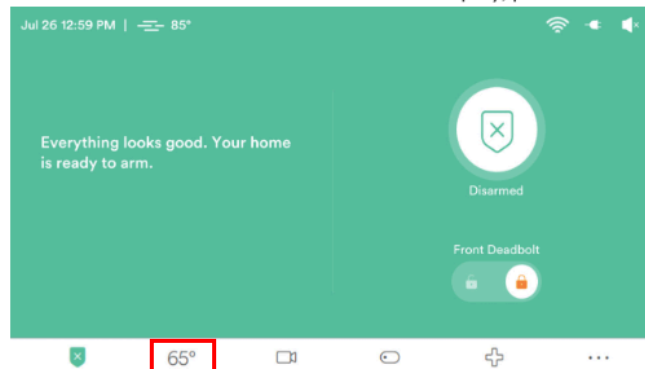


Source: <https://support.vivint.com/article/Smart-Properties-Element-Thermostat>

Vivint Smart Hub - Adjust Thermostat

How to adjust the thermostat temperature from the Smart Hub:

1. From the home screen of the Smart Hub display, press the **Temperature** display icon on the bottom menu bar.



Source: <https://support.vivint.com/article/Smart-Hub-Adjust-Thermostat>

Complaint, Exhibit 4.

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| | <p>Pair a thermostat to the panel/hub: — Media system</p> <p>1. Unlock the unit's Installer Toolbox from the Site Manager software.</p> <p>2. From the panel/hub home screen, select the menu icon (...) then Software Version. — Wireless mobile device</p> <p>3. Use the 4-digit code that appeared in Site Manager after unlocking the Installer Toolbox.</p> <p>4. Select Smart Home Devices.</p> <p>5. Select Z-Wave.</p> <p>6. Select Add Node.</p> <p>7. On the thermostat, hold the Vivint Smart Thermostat's side button down for about 6-10 seconds (there is a screen that will pop up after 2 seconds, the second Installer screen will pop up at about 6 seconds).</p> <p>8. Go down to Installer.</p> <p>9. Select Network.</p> <p>10. Select Connect.</p> <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p> |
| <p>[12.6] a communicati on link structured to dispose said media system and said wireless mobile device in a communicati ve relation with one another via said at least</p> | <p>Company provides a communication link structured to dispose said media system and said wireless mobile device in a communicative relation with one another via said at least one interactive computer network and said communication link being initiated by said media system.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, to pair the thermostat with the smart hub, 'smart home devices' settings are selected on the hub. Further, "Z-wave" and "Add Node" settings are selected to pair with the thermostat ("said communication link being initiated by said at least one media system").</p> <p>Further, when the pairing process is complete, a link ("communicative relation") is established between the thermostat and the smart hub via Z-wave protocol ("said at least one interactive computer network").</p> |

Complaint, Exhibit 4.

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| <p>one interactive computer network, said communication link being initiated by said media system,</p> | <p>Pair a thermostat to the panel/hub:</p> <ol style="list-style-type: none"> 1. Unlock the unit's Installer Toolbox from the Site Manager software. 2. From the panel/hub home screen, select the menu icon (...) then Software Version. 3. Use the 4-digit code that appeared in Site Manager after unlocking the Installer Toolbox. 4. Select Smart Home Devices. 5. Select Z-Wave. 6. Select Add Node. 7. On the thermostat, hold the Vivint Smart Thermostat's side button down for about 6-10 seconds (there is a screen that will pop up after 2 seconds, the second Installer screen will pop up at about 6 seconds). 8. Go down to Installer. 9. Select Network. 10. Select Connect. <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat</p> <p>One of the biggest benefits of smart home protocols is they can connect seamlessly to your mobile device or a central control panel like the Vivint Smart Hub.</p> <p>This means you can use your smartphone or smart hub to do things like arm your security system, adjust the room's temperature, or lock the doors.</p> <p>Below are some of the most popular smart home protocols:</p> <ul style="list-style-type: none"> • Z-Wave <p>Source: https://www.vivint.com/resources/article/smart-home-technologies-guide</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p> |
| <p>[12.7] said wireless mobile device and</p> | <p>Company provides a system for transmitting by said wireless mobile device and media system being structured to transmit said at least one digital media file therebetween via said communication link.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> |

Complaint, Exhibit 4.

media system being structured to transmit said at least one digital media file therebetween via said communication link, and

For example, after the pairing process is complete, the temperature measured by the thermostat, is reflected on the bottom of the smart hub screen. Therefore, it would be apparent to a person having ordinary skill in the art that the thermostat constantly syncs (“transmit said at least one digital media file therebetween via said communication link”) the temperature reading with the smart hub.

What is a smart thermostat?

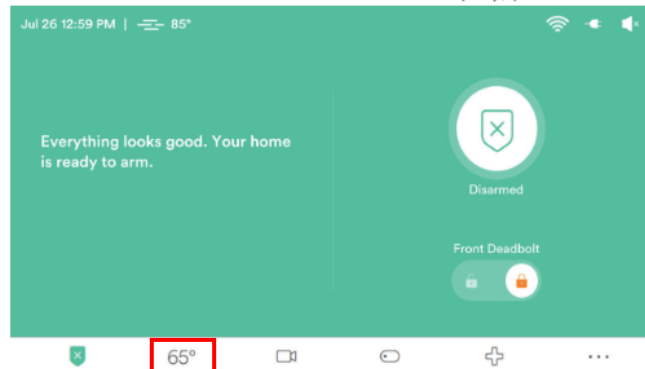
A smart thermostat, like the Vivint Smart Thermostat, uses built-in features like GPS, in-home sensors, and your personal preferences to automatically adjust your home’s temperature. It also integrates with your smart home technology, allowing you to control your temperature from anywhere.

Source: <https://www.vivint.com/products/smart-thermostat>

Vivint Smart Hub - Adjust Thermostat

How to adjust the thermostat temperature from the Smart Hub:

1. From the home screen of the Smart Hub display, press the **Temperature** display icon on the bottom menu bar.



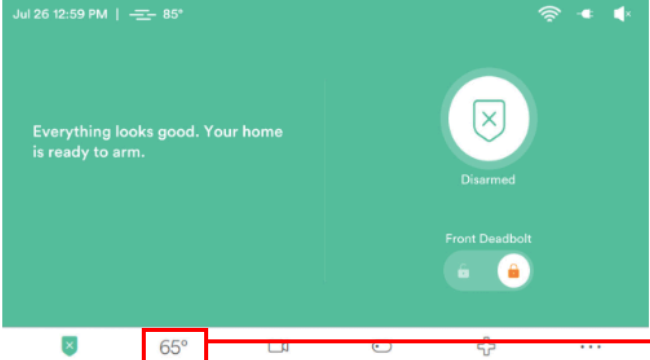
Source: <https://support.vivint.com/article/Smart-Hub-Adjust-Thermostat>

Further, to the extent this element is performed at least in part by Defendant’s software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.

Complaint, Exhibit 4.

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| <p>[12.8] said communication link is structured to bypass the security measure of the media system for a limited permissible use of the communication link by the wireless mobile device for only transferring the at least one digital media file to, and displaying the at least one digital media file on, the media system.</p> | <p>Company provides a system wherein said communication link is structured to bypass the security measure of the media system for a limited permissible use of the communication link by the wireless mobile device for only transferring the at least one digital media file to, and displaying the at least one digital media file on, the media system.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, once the devices are paired, a link is established between them, enabling the users to adjust the thermostat's temperature settings both from the thermostat and the smart hub as they are integrated with each other. As pairing is not necessary each time to make temperature adjustments via the smart hub, it would be apparent to a person having ordinary skill in the art that the established communication link is designed to bypass security measures related to the smart hub. Additionally, the temperature reading from the connected thermostat device is constantly synced and reflected on the smart hub (“displaying the at least one digital media file on, the media system”).</p> <p>Pair a thermostat to the panel/hub:</p> <ol style="list-style-type: none"> 1. Unlock the unit's Installer Toolbox from the Site Manager software. 2. From the panel/hub home screen, select the menu icon (...) then Software Version. 3. Use the 4-digit code that appeared in Site Manager after unlocking the Installer Toolbox. 4. Select Smart Home Devices. 5. Select Z-Wave. 6. Select Add Node. 7. On the thermostat, hold the Vivint Smart Thermostat's side button down for about 6-10 seconds (there is a screen that will pop up after 2 seconds, the second Installer screen will pop up at about 6 seconds). 8. Go down to Installer. 9. Select Network. 10. Select Connect. <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat</p> |
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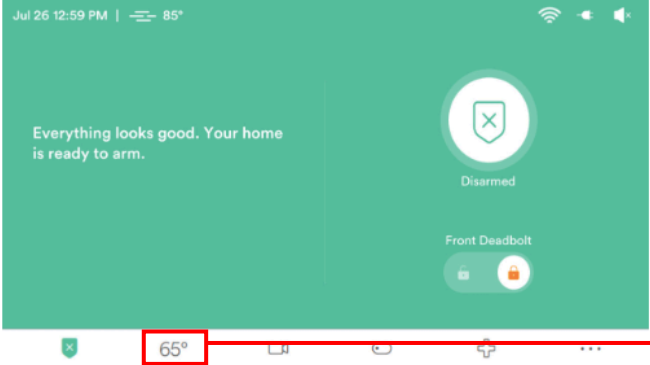
Complaint, Exhibit 4.

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| | <h2>Vivint Smart Hub - Adjust Thermostat</h2> <p><i>How to adjust the thermostat temperature from the Smart Hub:</i></p> <ol style="list-style-type: none"> 1. From the home screen of the Smart Hub display, press the Temperature display icon on the bottom menu bar.  <p>Source: https://support.vivint.com/article/Smart-Hub-Adjust-Thermostat (annotated)</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p> |
| <p>[17] The system of claim 12, wherein the communication link is at least one of a peer-to-peer connection, bluetooth connection,</p> | <p>Company provides the system of claim 12, wherein the communication link is at least one of a peer-to-peer connection, bluetooth connection, and a WiFi connection.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, the smart home devices such as thermostat communicate wirelessly with the smart hub using Z-Wave ("peer-to-peer connection").</p> |

Complaint, Exhibit 4.

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| <p>and a WiFi connection.</p> | <p>Specs</p> <p>Color: White</p> <p>Size: 4.5" h x 4.5" w x 0.9" d</p> <p>Weight: 10.1 oz (with batteries)</p> <p>Power: 4 AA batteries or 24V AC wired from HVAC system</p> <p>Screen: On-screen control</p> <p>Sensors: Temperature, humidity, proximity, and ambient light</p> <p>Supported Fuels: Natural gas, propane, electric, fuel oil, and geothermal</p> <p>Compatibility: Works with conventional forced air, radiant, and heat pump, with up to 3 stages of heating and up to 2 stages of cooling</p> <p>Connectivity: Z-Wave Peer-to-peer connection</p> <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat (annotated)</p> <p>Pair a thermostat to the panel/hub:</p> <ol style="list-style-type: none"> 1. Unlock the unit's Installer Toolbox from the Site Manager software. 2. From the panel/hub home screen, select the menu icon (...) then Software Version. 3. Use the 4-digit code that appeared in Site Manager after unlocking the Installer Toolbox. 4. Select Smart Home Devices. 5. Select Z-Wave. 6. Select Add Node. 7. On the thermostat, hold the Vivint Smart Thermostat's side button down for about 6-10 seconds (there is a screen that will pop up after 2 seconds, the second Installer screen will pop up at about 6 seconds). <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company</p> |
| <p>[19] The system of claim 12, further comprising</p> | <p>Company provides the system of claim 12, further comprising presenting the at least one digital media file on a display.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> |

Complaint, Exhibit 4.

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| <p>presenting the at least one digital media file on a display.</p> | <p>For example, the temperature reading is reflected on the smart hub (“displaying the at least one digital media file on, the media system”).</p> <h3>Vivint Smart Hub - Adjust Thermostat</h3> <p><i>How to adjust the thermostat temperature from the Smart Hub:</i></p> <ol style="list-style-type: none"> 1. From the home screen of the Smart Hub display, press the Temperature display icon on the bottom menu bar.  <p>Source: https://support.vivint.com/article/Smart-Hub-Adjust-Thermostat (annotated)</p> <p>Further, to the extent this element is performed at least in part by Defendant’s software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p> |
| <p>[20] The system of claim 12, wherein the at least one digital media file is provided by the wireless</p> | <p>Company provides the system of claim 12, wherein the at least one digital media file is provided by the wireless mobile device.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, the thermostat provides features to adjust the temperature. Therefore, it would be apparent to a person having ordinary skill in the art that the digital media file is provided by the media node.</p> |

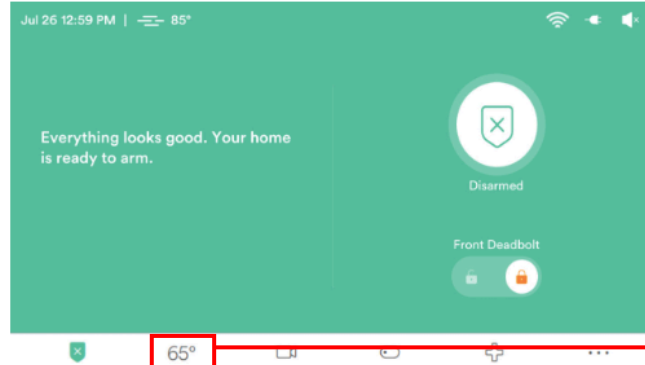
Complaint, Exhibit 4.

mobile
device.

Vivint Smart Hub - Adjust Thermostat

How to adjust the thermostat temperature from the Smart Hub:

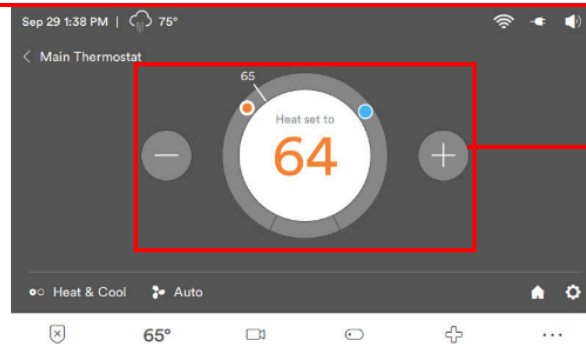
1. From the home screen of the Smart Hub display, press the **Temperature** display icon on the bottom menu bar.



Media file

Source: <https://support.vivint.com/article/Smart-Hub-Adjust-Thermostat>

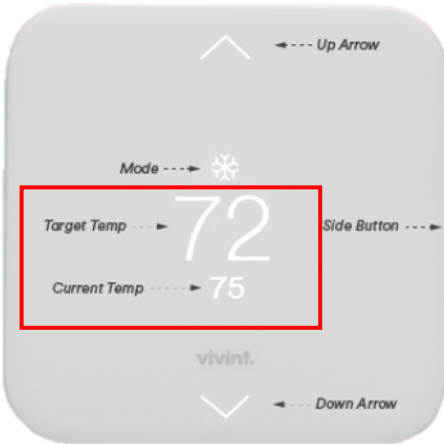
2. The temperature the thermostat is heating or cooling to will be displayed in the center. The current temperature in the home will be the smaller number on the edge of the circle. If you have more than one thermostat you will need to select the thermostat you want to adjust before you can change any settings.



Adjust Temperature

3. If the thermostat mode in the lower left corner is set to **Heat and Cool** you will need to tap on the orange or blue dot to change their temperature settings using the **Plus (+)** and **Minus (-)** icons.

Complaint, Exhibit 4.

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| | <p>Source: https://support.vivint.com/article/Smart-Hub-Adjust-Thermostat (annotated)</p>  <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company</p> |
| <p>[22.P] A method of transferring a media file from a wireless mobile device to a media system over a communication network, the media</p> | <p>Vivint ("Company") performs and/or induces others to perform a method of transferring a media file from a wireless mobile device to a media system over a communication network, the media system including a security measure.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, Company offers a Home security system which comprises a Smart Hub ("media system") which is paired with smart devices such as door locks, security camera and, thermostat ("wireless mobile device") via Z-Wave Technology ("communication network"). Since the smart hub and the thermostat are fully integrated therefore, the reading on/measured by the thermostat ("media file") is reflected on the smart hub. The pairing procedure between the smart hub and the thermostat indicates a presence of a security measure.</p> |

Complaint, Exhibit 4.

system including a security measure, comprising:

PROFESSIONALLY DESIGNED ALARM SYSTEMS

Home security systems customized for your home

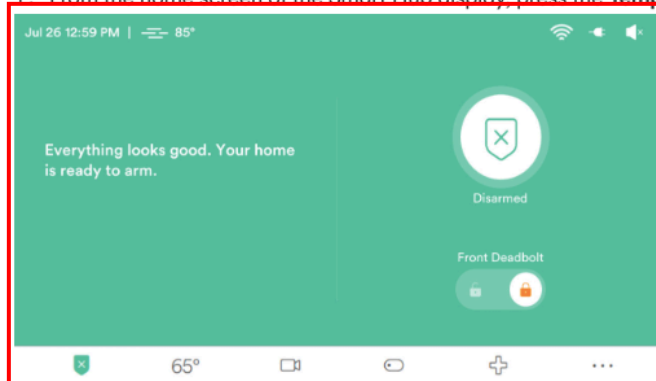
All of our products work together to create a fully-integrated home security system customized for your home. Every door, window, and blind spot is covered.

Source: <https://www.vivint.com/packages/home-security>

Vivint Smart Hub - Adjust Thermostat

How to adjust the thermostat temperature from the Smart Hub:

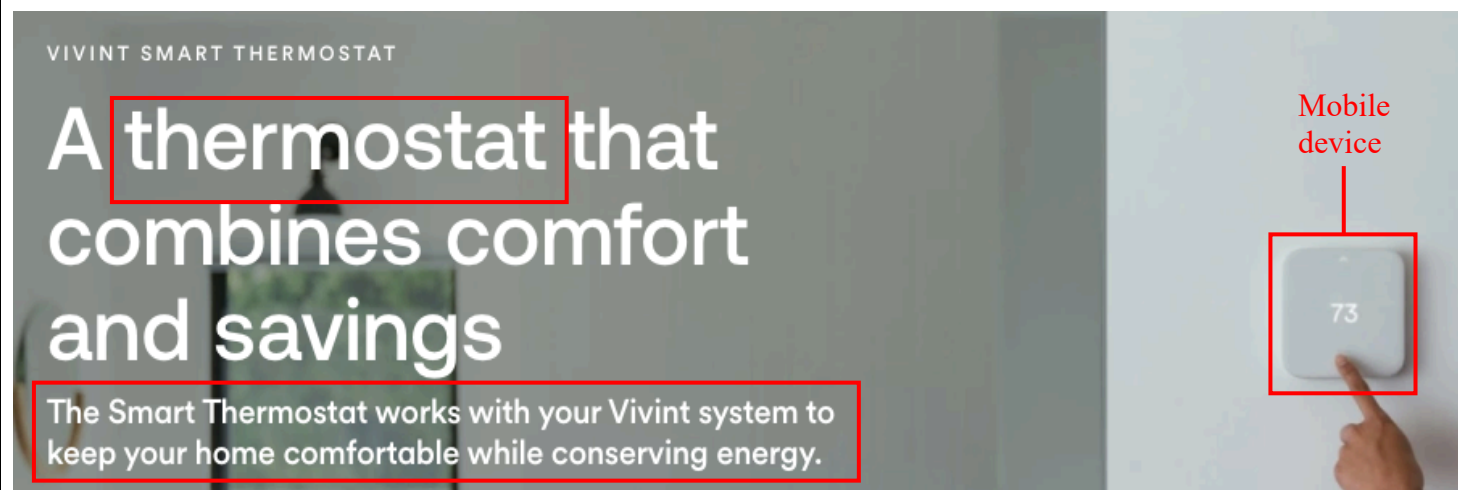
1. From the home screen of the Smart Hub display, press the **Temperature** display icon on the bottom menu bar.



Media System

Source: <https://support.vivint.com/article/Smart-Hub-Adjust-Thermostat> (annotated)

Complaint, Exhibit 4.



Source: <https://www.vivint.com/products/smart-thermostat> (annotated)

The Vivint Smart Hub offers integrated, intelligent home automation and communication with smart connected devices* that can be accessed and controlled either directly at the panel or remotely with the Vivint apps.

Source:

https://wwwassets.s3.amazonaws.com/global/vivint.com/Support/images/Vivint_SmartHubV2_GettingStartedGuide_ENU%20-%20revA.2.pdf , Page 13

What is a smart thermostat?

A smart thermostat, like the Vivint Smart Thermostat, uses built-in features like GPS, in-home sensors, and your personal preferences to automatically adjust your home's temperature. It also integrates with your smart home technology, allowing you to control your temperature from anywhere.

Source: <https://www.vivint.com/products/smart-thermostat>

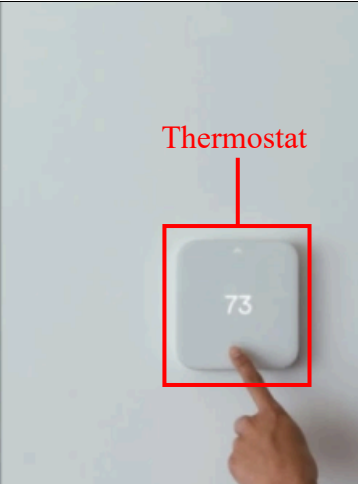
Complaint, Exhibit 4.

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| | Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company. |
| [22.1] disposing the media system in an accessible relation to at least one interactive computer network that has a wireless range structured to permit authorized access to said at least one interactive computer network, wherein the wireless mobile device within said wireless range, wherein said wireless mobile device is | <p>Company performs and/or induces others to perform a step of disposing the media system in an accessible relation to at least one interactive computer network, wherein the wireless mobile device within said wireless range, wherein said wireless mobile device is detectable by said media system.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, to pair ("accessible relation") the smart hub and the thermostat, the devices must be within a range of 100 meters ("a wireless range") of the Z-wave protocol ("computer network"). Further, Z-Wave network and devices in the Z-wave network are identified with their respective unique IDs. The unique IDs prevents unauthorized devices to access the Z-wave network. Therefore, upon information and belief, the thermostat devices that are within the wireless range of the Z-wave protocol are structured to permit authorized access to pair with the smart hub.</p> <p>Further, on the smart hub, 'smart home devices' settings followed by "Z-wave" and "Add Node" settings are selected on the hub to pair with the thermostat. Further, the thermostat's side button is held for 6 seconds to make it detectable for pairing with the hub ("wireless mobile device is detectable by said media system").</p> <div style="border: 2px solid red; padding: 10px; margin: 10px 0;"> <p>While Z-Wave has a range of 100 meters or 328 feet in open air, building materials reduce that range, it is recommended to have a Z-Wave device roughly every 30 feet, or closer for maximum efficiency. The Z-Wave signal can hop roughly 600 feet, and Z-Wave networks can be linked together for even larger</p> </div> <p>deployments. Each Z-Wave network can support up to 232 Z-Wave devices allowing you the flexibility to add as many devices as you'd like to make sure your Smart Home is working it's hardest.</p> <p>Source: https://www.z-wave.com/learn</p> |

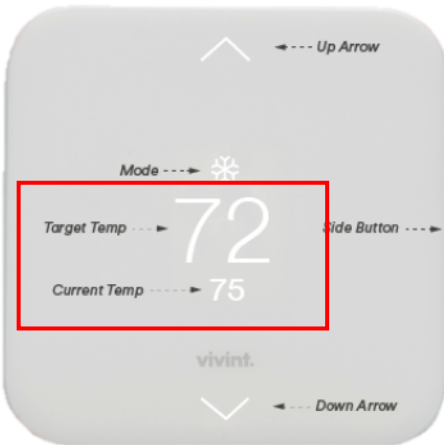
Complaint, Exhibit 4.

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| <p>detectable by said media system,</p> | <p>In terms of identification and authorization, each Z-Wave network is identified by a network ID and each end device is identified with a node ID. The unique network ID prevents, for example, one Z-Wave-equipped house from controlling devices in another similarly equipped house.</p> <p>Source: https://www.techtarget.com/iotagenda/definition/Z-Wave</p> <p>Pair a thermostat to the panel/hub: — Media System</p> <ol style="list-style-type: none"> 1. Unlock the unit's Installer Toolbox from the Site Manager software. — Mobile device 2. From the panel/hub home screen, select the menu icon (...) then Software Version. 3. Use the 4-digit code that appeared in Site Manager after unlocking the Installer Toolbox. 4. Select Smart Home Devices. 5. Select Z-Wave. 6. Select Add Node. 7. On the thermostat, hold the Vivint Smart Thermostat's side button down for about 6-10 seconds (there is a screen that will pop up after 2 seconds, the second Installer screen will pop up at about 6 seconds). 8. Go down to Installer. 9. Select Network. 10. Select Connect. <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat</p> |
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Complaint, Exhibit 4.

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| | <p>VIVINT SMART THERMOSTAT</p> <h1>A thermostat that combines comfort and savings</h1> <p>The Smart Thermostat works with your Vivint system to keep your home comfortable while conserving energy.</p>  <p>Source: https://www.vivint.com/products/smart-thermostat (annotated)</p> <h2>Specs</h2> <p>Color: White Size: 4.5" h x 4.5" w x 0.9" d Weight: 10.1 oz (with batteries) Power: 4 AA batteries or 24V AC wired from HVAC system Screen: On-screen control Sensors: Temperature, humidity, proximity, and ambient light Supported Fuels: Natural gas, propane, electric, fuel oil, and geothermal Compatibility: Works with conventional forced air, radiant, and heat pump, with up to 3 stages of heating and up to 2 stages of cooling Connectivity: Z-Wave</p> <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p> |
| [22.2] initially disposing at least one | <p>Company performs and/or induces others to perform a step of initially disposing at least one digital media file on the wireless mobile device, said media system being structured to detect said wireless mobile device disposed within said wireless range.</p> |

Complaint, Exhibit 4.

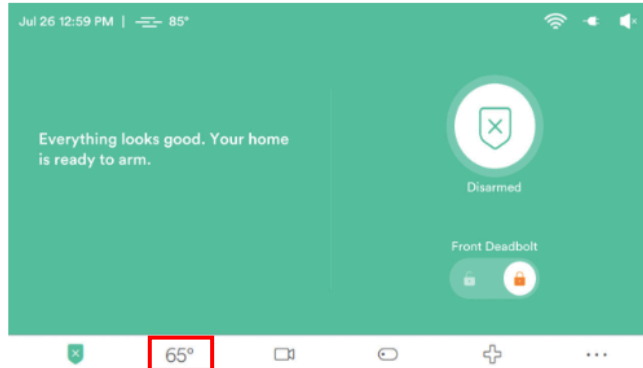
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| <p>digital media file on the wireless mobile device, said media system being structured to detect said wireless mobile device disposed within said wireless range,</p> | <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, the thermostat displays a current temperature and a target temperature (“initially disposing at least one digital media file on the wireless mobile device”) and the same reading is reflected on the smart hub.</p> <p>Further, to pair the thermostat and the smart hub, ‘smart home devices’ settings followed by “Z-wave” and “Add Node” settings are selected on the hub to pair with the thermostat. Furthermore, when the thermostat’s side button is held for 6 seconds, it becomes detectable for the Z-wave network (“said media system being structured to detect said wireless mobile device disposed within said wireless range”), and upon clicking the Connect button for the searched network, the thermostat is paired with the smart hub.</p>  <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat</p> |
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Complaint, Exhibit 4.

Vivint Smart Hub - Adjust Thermostat

How to adjust the thermostat temperature from the Smart Hub:

1. From the home screen of the Smart Hub display, press the **Temperature** display icon on the bottom menu bar.



Source: <https://support.vivint.com/article/Smart-Hub-Adjust-Thermostat>

Pair a thermostat to the panel/hub: — Media system

1. Unlock the unit's Installer Toolbox from the Site Manager software.
2. From the panel/hub home screen, select the menu icon (...) then **Software Version**.
3. Use the 4-digit code that appeared in Site Manager after unlocking the Installer Toolbox.
4. Select **Smart Home Devices**.
5. Select **Z-Wave**.
6. Select **Add Node**.
7. On the thermostat, hold the Vivint Smart Thermostat's side button down for about 6-10 seconds (there is a screen that will pop up after 2 seconds, the second Installer screen will pop up at about 6 seconds).
8. Go down to **Installer**.
9. Select **Network**.
10. Select **Connect**.

Source: <https://support.vivint.com/article/Smart-Properties-Element-Thermostat>

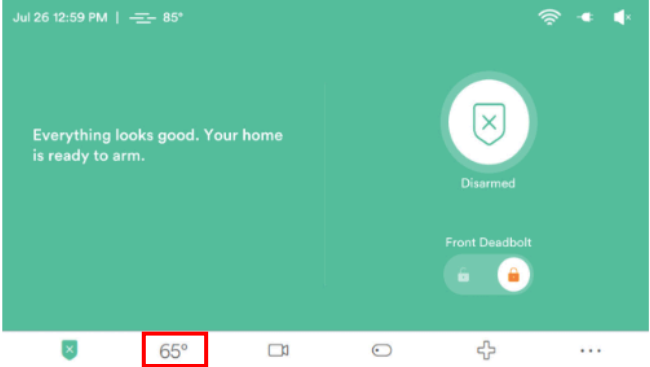
Complaint, Exhibit 4.

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| | Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company. |
| [22.3] structuring a communication link to dispose said media system and said wireless mobile device in a communicative relation with one another via said at least one interactive computer network, initiating said communication link by said media system, | <p>Company performs and/or induces others to perform a step of structuring a communication link to dispose said media system and said wireless mobile device in a communicative relation with one another via said at least one interactive computer network, initiating said communication link by said media system.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, to pair the thermostat with the smart hub, 'smart home devices' settings are selected on the hub. Further, "Z-wave" and "Add Node" settings are selected to pair with the thermostat ("initiating said communication link by said media system").</p> <p>Further, when the pairing process is complete, a link ("communicative relation") is established between the thermostat and the smart hub via Z-wave protocol ("said at least one interactive computer network").</p> <p>Pair a thermostat to the panel/hub:</p> <ol style="list-style-type: none"> 1. Unlock the unit's Installer Toolbox from the Site Manager software. 2. From the panel/hub home screen, select the menu icon (...) then Software Version. 3. Use the 4-digit code that appeared in Site Manager after unlocking the Installer Toolbox. 4. Select Smart Home Devices. 5. Select Z-Wave. 6. Select Add Node. 7. On the thermostat, hold the Vivint Smart Thermostat's side button down for about 6-10 seconds (there is a screen that will pop up after 2 seconds, the second Installer screen will pop up at about 6 seconds). 8. Go down to Installer. 9. Select Network. 10. Select Connect. <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat</p> |

Complaint, Exhibit 4.

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| | <p>One of the biggest benefits of smart home protocols is they can connect seamlessly to your mobile device or a central control panel like the Vivint Smart Hub.</p> <p>This means you can use your smartphone or smart hub to do things like arm your security system, adjust the room's temperature, or lock the doors.</p> <p>Below are some of the most popular smart home protocols:</p> <ul style="list-style-type: none"> • Z-Wave <p>Source: https://www.vivint.com/resources/article/smart-home-technologies-guide</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p> |
| <p>[22.4] transmitting by said wireless mobile device to the media system said at least one digital media file therebetween via said communication link, and</p> | <p>Company performs and/or induces others to perform a step of transmitting by said wireless mobile device to the media system said at least one digital media file therebetween via said communication link.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents. For example, after the pairing process is complete, the temperature measured by the thermostat, is reflected on the bottom of the smart hub screen. Therefore, it would be apparent to a person having ordinary skill in the art that the thermostat constantly syncs ("transmitting by said wireless mobile device to the media system said at least one digital media file") the temperature reading with the smart hub.</p> <p>What is a smart thermostat?</p> <p>A smart thermostat, like the Vivint Smart Thermostat, uses built-in features like GPS, in-home sensors, and your personal preferences to automatically adjust your home's temperature. It also integrates with your smart home technology, allowing you to control your temperature from anywhere.</p> <p>Source: https://www.vivint.com/products/smart-thermostat</p> |

Complaint, Exhibit 4.

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| | <h2>Vivint Smart Hub - Adjust Thermostat</h2> <p><i>How to adjust the thermostat temperature from the Smart Hub:</i></p> <ol style="list-style-type: none"> 1. From the home screen of the Smart Hub display, press the Temperature display icon on the bottom menu bar.  <p>Source: https://support.vivint.com/article/Smart-Hub-Adjust-Thermostat</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p> |
| <p>[22.5] wherein said communication link is structured to bypass the security measure of the media system for a limited permissible use of the</p> | <p>Company performs and/or induces others to perform a step wherein said communication link is structured to bypass the security measure of the media system for a limited permissible use of the communication link by the wireless mobile device for only transferring the at least one digital media file to, and displaying the at least one digital media file on, the media system.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, once the devices are paired, a link is established between them, enabling the users to adjust the thermostat's temperature settings both from the thermostat and the smart hub as they are integrated with each other. As pairing is not necessary each time to make temperature adjustments via the smart hub, it would be apparent to a person having ordinary skill in the art that the established communication link is structured to bypass the security measure related to the smart hub. Additionally, the temperature reading from the connected thermostat device is constantly synced and reflected on the smart hub ("displaying the at least one digital media file on, the media system").</p> |

Complaint, Exhibit 4.

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wireless
mobile
device for
only
transferring
the at least
one digital
media file to,
and
displaying
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one digital
media file on,
the media
system.

Pair a thermostat to the panel/hub:

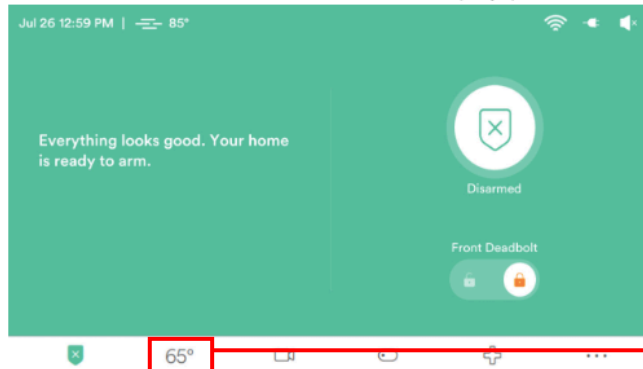
1. Unlock the unit's Installer Toolbox from the Site Manager software.
2. From the panel/hub home screen, select the menu icon (...) then **Software Version**.
3. Use the 4-digit code that appeared in Site Manager after unlocking the Installer Toolbox.
4. Select **Smart Home Devices**.
5. Select **Z-Wave**.
6. Select **Add Node**.
7. On the thermostat, hold the Vivint Smart Thermostat's side button down for about 6-10 seconds (there is a screen that will pop up after 2 seconds, the second Installer screen will pop up at about 6 seconds).
8. Go down to **Installer**.
9. Select **Network**.
10. Select **Connect**.

Source: <https://support.vivint.com/article/Smart-Properties-Element-Thermostat>

Vivint Smart Hub - Adjust Thermostat

How to adjust the thermostat temperature from the Smart Hub:

1. From the home screen of the Smart Hub display, press the **Temperature** display icon on the bottom menu bar.



digital media file on, the media system

Source: <https://support.vivint.com/article/Smart-Hub-Adjust-Thermostat> (annotated)

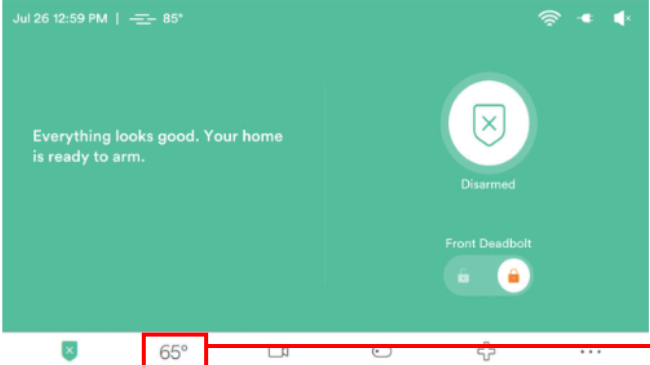
Complaint, Exhibit 4.

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| | Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company. |
| [27] The method of claim 22, wherein the communication link is at least one of a peer-to-peer connection, bluetooth connection, and a WiFi connection. | <p>Company performs and induces others to perform the method of claim 22, wherein the communication link is at least one of a peer-to-peer connection, bluetooth connection, and a WiFi connection.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, the smart home devices such as thermostat communicate wirelessly with the smart hub using Z-Wave ('peer-to-peer connection').</p> <p>Specs</p> <p>Color: White</p> <p>Size: 4.5" h x 4.5" w x 0.9" d</p> <p>Weight: 10.1 oz (with batteries)</p> <p>Power: 4 AA batteries or 24V AC wired from HVAC system</p> <p>Screen: On-screen control</p> <p>Sensors: Temperature, humidity, proximity, and ambient light</p> <p>Supported Fuels: Natural gas, propane, electric, fuel oil, and geothermal</p> <p>Compatibility: Works with conventional forced air, radiant, and heat pump, with up to 3 stages of heating and up to 2 stages of cooling</p> <p>Connectivity: Z-Wave Peer-to-peer connection</p> <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat (annotated)</p> |

Complaint, Exhibit 4.

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| | <p>Pair a thermostat to the panel/hub:</p> <ol style="list-style-type: none"> 1. Unlock the unit's Installer Toolbox from the Site Manager software. 2. From the panel/hub home screen, select the menu icon (...) then Software Version. 3. Use the 4-digit code that appeared in Site Manager after unlocking the Installer Toolbox. 4. Select Smart Home Devices. 5. Select Z-Wave. 6. Select Add Node. 7. On the thermostat, hold the Vivint Smart Thermostat's side button down for about 6-10 seconds (there is a screen that will pop up after 2 seconds, the second Installer screen will pop up at about 6 seconds). <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p> |
| <p>[29] The method of claim 22, further comprising presenting the at least one digital media file on a display.</p> | <p>Company performs and induces others to perform the method of claim 22, further comprising presenting the at least one digital media file on a display.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, the temperature reading is reflected on the smart hub ("presenting the at least one digital media file on a display").</p> |

Complaint, Exhibit 4.

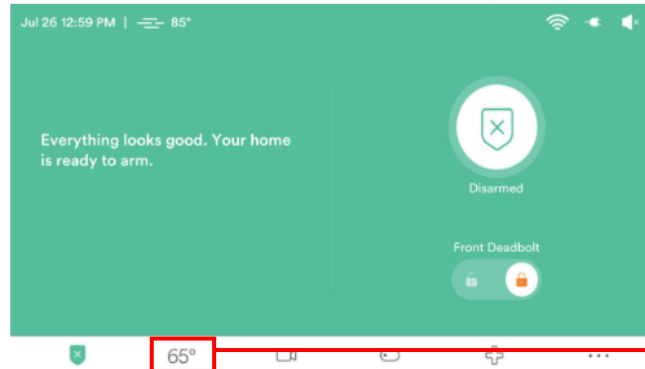
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| | <h2>Vivint Smart Hub - Adjust Thermostat</h2> <p><i>How to adjust the thermostat temperature from the Smart Hub:</i></p> <ol style="list-style-type: none"> 1. From the home screen of the Smart Hub display, press the Temperature display icon on the bottom menu bar.  <p>Source: https://support.vivint.com/article/Smart-Hub-Adjust-Thermostat (annotated)</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p> |
| <p>[30] The method of claim 22, wherein the at least one digital media file is provided by the wireless mobile device.</p> | <p>Company performs and induces others to perform the method of claim 22, wherein the at least one digital media file is provided by the wireless mobile device.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, the thermostat provides features to adjust the temperature. Therefore, it would be apparent to a person having ordinary skill in the art that the digital media file is provided by the media node.</p> |

Complaint, Exhibit 4.

Vivint Smart Hub - Adjust Thermostat

How to adjust the thermostat temperature from the Smart Hub:

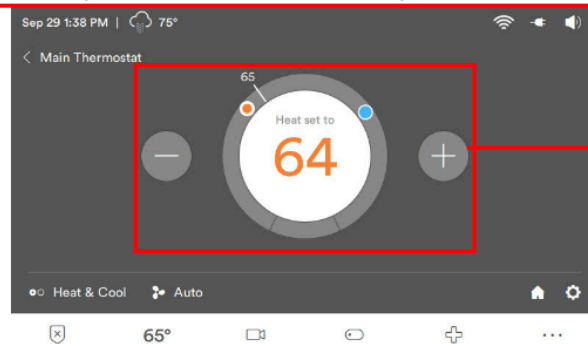
1. From the home screen of the Smart Hub display, press the **Temperature** display icon on the bottom menu bar.



Media file

Source: <https://support.vivint.com/article/Smart-Hub-Adjust-Thermostat>

2. The temperature the thermostat is heating or cooling to will be displayed in the center. The current temperature in the home will be the smaller number on the edge of the circle. If you have more than one thermostat you will need to select the thermostat you want to adjust before you can change any settings.

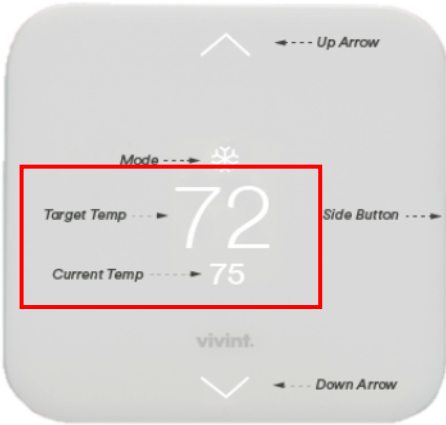


Adjust Temperature

3. If the thermostat mode in the lower left corner is set to **Heat and Cool** you will need to tap on the orange or blue dot to change their temperature settings using the **Plus (+)** and **Minus (-)** icons.

Source: <https://support.vivint.com/article/Smart-Hub-Adjust-Thermostat> (annotated)

Complaint, Exhibit 4.

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| |  <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p> |
| <p>[32.P] A wireless mobile device configured to transmit a media file to a media system over a communication network having a security measure comprising:</p> | <p>Vivint ("Company") makes, uses, sells and/or offers to sell a wireless mobile device configured to transmit a media file to a media system over a communication network having a security measure.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, Company offers a Home security system which comprises a Smart Hub ("media system") which is paired with smart devices such as door locks, security camera and, thermostat ("wireless mobile device") via Z-Wave Technology ("communication network"). Since the smart hub and the thermostat are fully integrated therefore, the reading on/measured by the thermostat ("media file") is reflected on the smart hub. The pairing procedure between the smart hub and the thermostat indicates a presence of a security measure.</p> |

Complaint, Exhibit 4.

PROFESSIONALLY DESIGNED ALARM SYSTEMS

Home security systems customized for your home

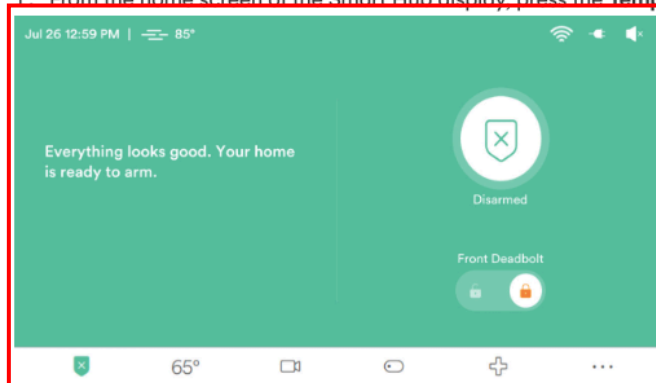
All of our products work together to create a fully-integrated home security system customized for your home. Every door, window, and blind spot is covered.

Source: <https://www.vivint.com/packages/home-security>

Vivint Smart Hub - Adjust Thermostat

How to adjust the thermostat temperature from the Smart Hub:

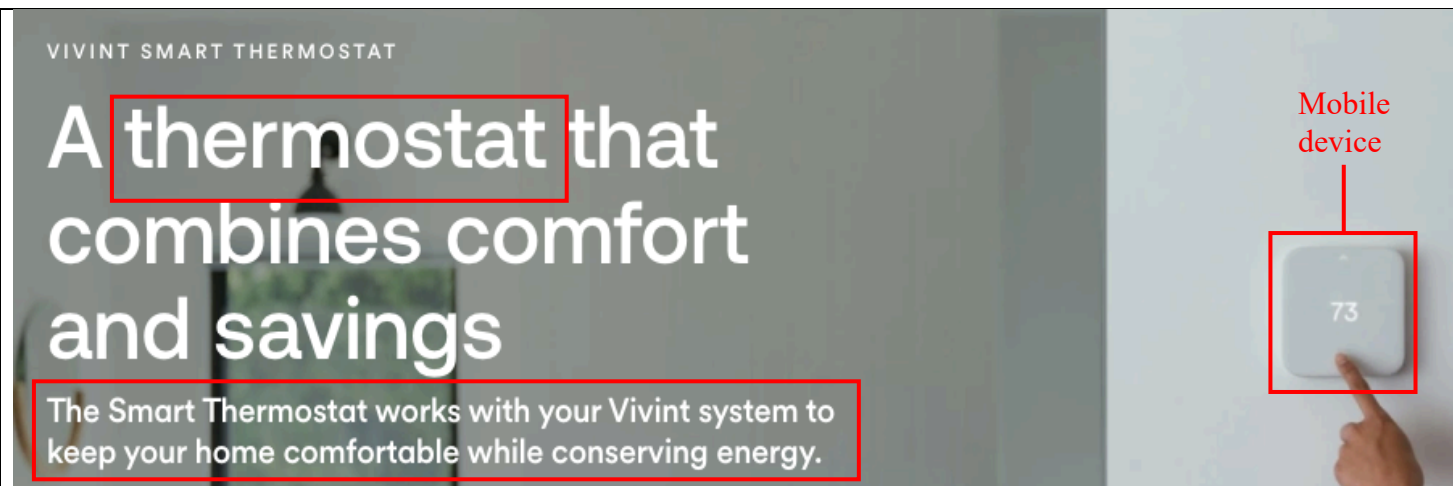
1. From the home screen of the Smart Hub display, press the **Temperature** display icon on the bottom menu bar.



Media System

Source: <https://support.vivint.com/article/Smart-Hub-Adjust-Thermostat> (annotated)

Complaint, Exhibit 4.



Source: <https://www.vivint.com/products/smart-thermostat> (annotated)

The Vivint Smart Hub offers integrated, intelligent home automation and communication with smart connected devices* that can be accessed and controlled either directly at the panel or remotely with the Vivint apps.

Source:

https://wwwassets.s3.amazonaws.com/global/vivint.com/Support/images/Vivint_SmartHubV2_GettingStartedGuide_ENU%20-%20revA.2.pdf , Page 13

What is a smart thermostat?

A smart thermostat, like the Vivint Smart Thermostat, uses built-in features like GPS, in-home sensors, and your personal preferences to automatically adjust your home's temperature. It also integrates with your smart home technology, allowing you to control your temperature from anywhere.

Source: <https://www.vivint.com/products/smart-thermostat>

Complaint, Exhibit 4.

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| | <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p> |
| <p>[32.1] the media system disposed in an accessible relation to at least one interactive computer network that has a wireless range structured to permit authorized access to said at least one interactive computer network,</p> | <p>Company provides the media system disposed in an accessible relation to at least one interactive computer network that has a wireless range structured to permit authorized access to said at least one interactive computer network.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, to pair ("accessible relation") the smart hub and the thermostat, the devices must be within a range of 100 meters ("a wireless range") of the Z-wave protocol ("computer network"). Further, Z-Wave network and devices in the Z-wave network are identified with their respective unique IDs. The unique IDs prevents unauthorized devices to access the Z-wave network. Therefore, upon information and belief, the thermostat devices that are within the wireless range of the Z-wave protocol are structured to permit authorized access to pair with the smart hub.</p> <div style="border: 2px solid red; padding: 10px; margin: 10px 0;"> <p>While Z-Wave has a range of 100 meters or 328 feet in open air, building materials reduce that range, it is recommended to have a Z-Wave device roughly every 30 feet, or closer for maximum efficiency. The Z-Wave signal can hop roughly 600 feet, and Z-Wave networks can be linked together for even larger</p> </div> <p>deployments. Each Z-Wave network can support up to 232 Z-Wave devices allowing you the flexibility to add as many devices as you'd like to make sure your Smart Home is working it's hardest.</p> <p>Source: https://www.z-wave.com/learn</p> <p>In terms of identification and authorization, each Z-Wave network is identified by a network ID and each end device is identified with a node ID. The unique network ID prevents, for example, one Z-Wave-equipped house from controlling devices in another similarly equipped house.</p> <p>Source: https://www.techtarget.com/iotagenda/definition/Z-Wave</p> |

Complaint, Exhibit 4.

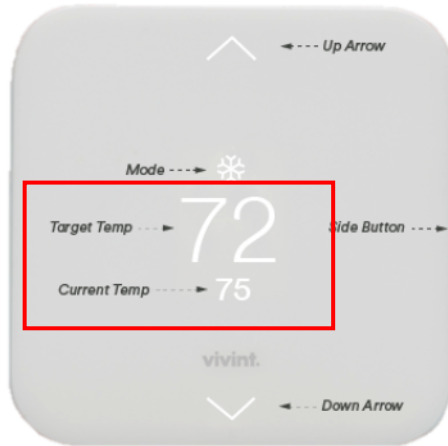
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| | <p>Pair a thermostat to the panel/hub: — Media system</p> <ol style="list-style-type: none"> 1. Unlock the unit's Installer Toolbox from the Site Manager software. 2. From the panel/hub home screen, select the menu icon (...) then Software Version. 3. Use the 4-digit code that appeared in Site Manager after unlocking the Installer Toolbox. 4. Select Smart Home Devices. 5. Select Z-Wave. 6. Select Add Node. 7. On the thermostat, hold the Vivint Smart Thermostat's side button down for about 6-10 seconds (there is a screen that will pop up after 2 seconds, the second Installer screen will pop up at about 6 seconds). 8. Go down to Installer. 9. Select Network. 10. Select Connect. <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat</p> <p>Specs</p> <p>Color: White Size: 4.5" h x 4.5" w x 0.9" d Weight: 10.1 oz (with batteries) Power: 4 AA batteries or 24V AC wired from HVAC system Screen: On-screen control Sensors: Temperature, humidity, proximity, and ambient light Supported Fuels: Natural gas, propane, electric, fuel oil, and geothermal Compatibility: Works with conventional forced air, radiant, and heat pump, with up to 3 stages of heating and up to 2 stages of cooling Connectivity: Z-Wave</p> <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p> |
| [32.2] the wireless | Company provides the wireless mobile device within said wireless range, wherein said wireless mobile device is detectable by said media system. |

Complaint, Exhibit 4.

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| <p>mobile device within said wireless range, wherein said wireless mobile device is detectable by said media system,</p> | <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, on the smart hub, ‘smart home devices’ settings followed by “Z-wave” and “Add Node” settings are selected on the hub to pair with the thermostat. Further, the thermostat's side button is held for 6 seconds to make it detectable for pairing with the hub (“wireless mobile device is detectable by said media system”).</p> <div style="border: 2px solid red; padding: 10px; margin: 10px 0;"> <p>While Z-Wave has a range of 100 meters or 328 feet in open air, building materials reduce that range, it is recommended to have a Z-Wave device roughly every 30 feet, or closer for maximum efficiency. The Z-Wave signal can hop roughly 600 feet, and Z-Wave networks can be linked together for even larger</p> </div> <p>deployments. Each Z-Wave network can support up to 232 Z-Wave devices allowing you the flexibility to add as many devices as you’d like to make sure your Smart Home is working it’s hardest.</p> <p>Source: https://www.z-wave.com/learn</p> <p>Further, to the extent this element is performed at least in part by Defendant’s software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p> |
| <p>[32.3] at least one digital media file initially disposed on the wireless mobile device, said media system being structured to detect said wireless</p> | <p>Company provides at least one digital media file initially disposed on the wireless mobile device, said media system being structured to detect said wireless mobile device disposed within said wireless range.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, the thermostat displays a current temperature and a target temperature (“digital media file initially disposed on the wireless mobile device”) and the same reading is reflected on the smart hub.</p> <p>Further, to pair the thermostat and the smart hub, ‘smart home devices’ settings followed by “Z-wave” and “Add Node” settings are selected on the hub to pair with the thermostat. Furthermore, when the thermostat’s side button is held for 6 seconds, it becomes detectable for the Z-wave network (“said media system being structured to detect said wireless mobile device within said wireless range”), and upon clicking the Connect button for the searched network, the thermostat is paired with the smart hub.</p> |

Complaint, Exhibit 4.

mobile
device
disposed
within said
wireless
range,

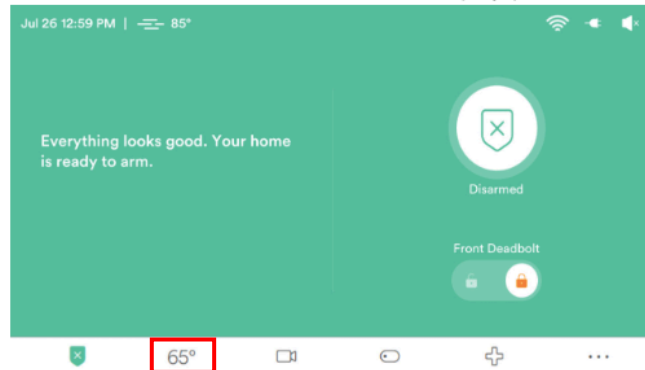


Source: <https://support.vivint.com/article/Smart-Properties-Element-Thermostat>

Vivint Smart Hub - Adjust Thermostat

How to adjust the thermostat temperature from the Smart Hub:

1. From the home screen of the Smart Hub display, press the **Temperature** display icon on the bottom menu bar.



Source: <https://support.vivint.com/article/Smart-Hub-Adjust-Thermostat>

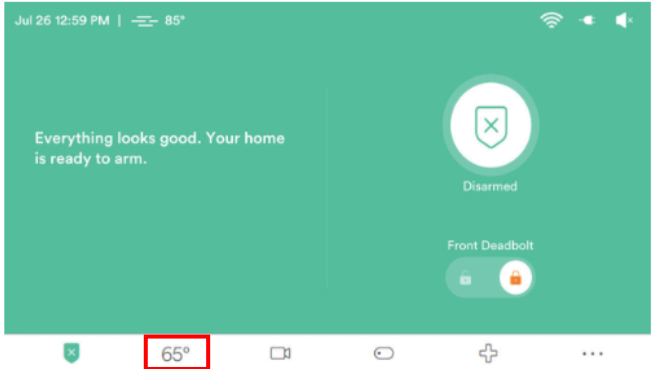
Complaint, Exhibit 4.

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| | <p>Pair a thermostat to the panel/hub: — Media system</p> <p>1. Unlock the unit's Installer Toolbox from the Site Manager software.</p> <p>2. From the panel/hub home screen, select the menu icon (...) then Software Version. — Wireless mobile device</p> <p>3. Use the 4-digit code that appeared in Site Manager after unlocking the Installer Toolbox.</p> <p>4. Select Smart Home Devices.</p> <p>5. Select Z-Wave.</p> <p>6. Select Add Node.</p> <p>7. On the thermostat, hold the Vivint Smart Thermostat's side button down for about 6-10 seconds (there is a screen that will pop up after 2 seconds, the second Installer screen will pop up at about 6 seconds).</p> <p>8. Go down to Installer.</p> <p>9. Select Network.</p> <p>10. Select Connect.</p> <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p> |
| [32.4] a communicati on link structured to dispose said media system and said wireless mobile device in a communicati ve relation with one another via said at least one | <p>Company provides a communication link structured to dispose said media system and said wireless mobile device in a communicative relation with one another via said at least one interactive computer network, said communication link being initiated by said media system.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, to pair the thermostat with the smart hub, 'smart home devices' settings are selected on the hub. Further, "Z-wave" and "Add Node" settings are selected to pair with the thermostat ("said communication link being initiated by said at least one media system").</p> <p>Further, when the pairing process is complete, a link ("communicative relation") is established between the thermostat and the smart hub via Z-wave protocol ("said at least one interactive computer network").</p> |

Complaint, Exhibit 4.

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| <p>interactive computer network, said communication link being initiated by said media system,</p> | <p>Pair a thermostat to the panel/hub:</p> <ol style="list-style-type: none"> 1. Unlock the unit's Installer Toolbox from the Site Manager software. 2. From the panel/hub home screen, select the menu icon (...) then Software Version. 3. Use the 4-digit code that appeared in Site Manager after unlocking the Installer Toolbox. 4. Select Smart Home Devices. 5. Select Z-Wave. 6. Select Add Node. 7. On the thermostat, hold the Vivint Smart Thermostat's side button down for about 6-10 seconds (there is a screen that will pop up after 2 seconds, the second Installer screen will pop up at about 6 seconds). 8. Go down to Installer. 9. Select Network. 10. Select Connect. <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat</p> <p>One of the biggest benefits of smart home protocols is they can connect seamlessly to your mobile device or a central control panel like the Vivint Smart Hub.</p> <p>This means you can use your smartphone or smart hub to do things like arm your security system, adjust the room's temperature, or lock the doors.</p> <p>Below are some of the most popular smart home protocols:</p> <ul style="list-style-type: none"> • Z-Wave <p>Source: https://www.vivint.com/resources/article/smart-home-technologies-guide</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p> |
| <p>[32.5] said wireless mobile device and media system</p> | <p>Company provides said wireless mobile device and media system being structured to transmit said at least one digital media file therebetween via said communication link.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> |

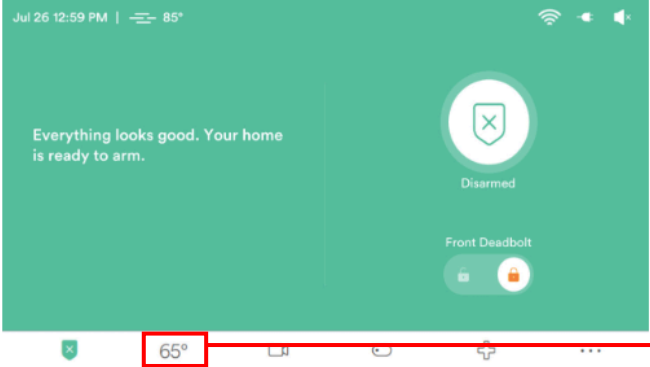
Complaint, Exhibit 4.

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| <p>being structured to transmit said at least one digital media file therebetween via said communication link, and</p> | <p>For example, after the pairing process is complete, the temperature measured by the thermostat, is reflected on the bottom of the smart hub screen. Therefore, it would be apparent to a person having ordinary skill in the art that the thermostat constantly syncs (“transmit said at least one digital media file therebetween via said communication link”) the temperature reading with the smart hub.</p> <p>What is a smart thermostat?</p> <p>A smart thermostat, like the Vivint Smart Thermostat, uses built-in features like GPS, in-home sensors, and your personal preferences to automatically adjust your home’s temperature. It also integrates with your smart home technology, allowing you to control your temperature from anywhere.</p> <p>Source: https://www.vivint.com/products/smart-thermostat</p> <p>Vivint Smart Hub - Adjust Thermostat</p> <p><i>How to adjust the thermostat temperature from the Smart Hub:</i></p> <ol style="list-style-type: none"> 1. From the home screen of the Smart Hub display, press the Temperature display icon on the bottom menu bar.  <p>Source: https://support.vivint.com/article/Smart-Hub-Adjust-Thermostat</p> <p>Further, to the extent this element is performed at least in part by Defendant’s software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p> |
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Complaint, Exhibit 4.

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| <p>[32.6] said communication link is structured to bypass the security measure of the media system for a limited permissible use of the communication link by the wireless mobile device for only transferring the at least one digital media file to, and displaying the at least one digital media file on, the media system.</p> | <p>Company provides said communication link is structured to bypass the security measure of the media system for a limited permissible use of the communication link by the wireless mobile device for only transferring the at least one digital media file to, and displaying the at least one digital media file on, the media system.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, once the devices are paired, a link is established between them, enabling the users to adjust the thermostat's temperature settings both from the thermostat and the smart hub as they are integrated with each other. As pairing is not necessary each time to make temperature adjustments via the smart hub, it would be apparent to a person having ordinary skill in the art that the established communication link is designed to bypass security measures related to the smart hub. Additionally, the temperature reading from the connected thermostat device is constantly synced and reflected on the smart hub (“displaying the at least one digital media file on, the media system”).</p> <p>Pair a thermostat to the panel/hub:</p> <ol style="list-style-type: none"> 1. Unlock the unit's Installer Toolbox from the Site Manager software. 2. From the panel/hub home screen, select the menu icon (...) then Software Version. 3. Use the 4-digit code that appeared in Site Manager after unlocking the Installer Toolbox. 4. Select Smart Home Devices. 5. Select Z-Wave. 6. Select Add Node. 7. On the thermostat, hold the Vivint Smart Thermostat's side button down for about 6-10 seconds (there is a screen that will pop up after 2 seconds, the second Installer screen will pop up at about 6 seconds). 8. Go down to Installer. 9. Select Network. 10. Select Connect. <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat</p> |
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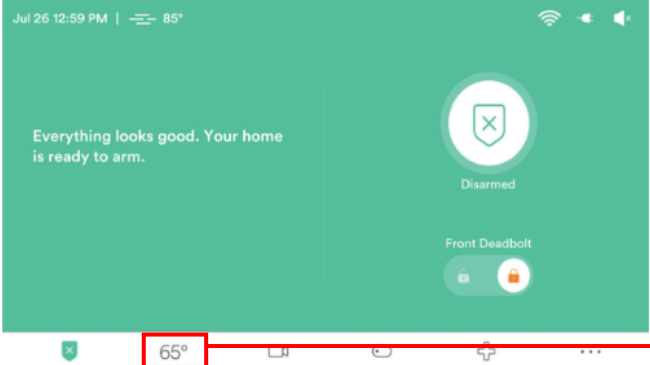
Complaint, Exhibit 4.

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| | <h2>Vivint Smart Hub - Adjust Thermostat</h2> <p><i>How to adjust the thermostat temperature from the Smart Hub:</i></p> <ol style="list-style-type: none"> 1. From the home screen of the Smart Hub display, press the Temperature display icon on the bottom menu bar.  <p>Source: https://support.vivint.com/article/Smart-Hub-Adjust-Thermostat (annotated)</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p> |
| <p>[37] The system of claim 32, wherein the communication link is at least one of a peer-to-peer connection, bluetooth connection, and a WiFi connection.</p> | <p>Company provides the system of claim 32, wherein the communication link is at least one of a peer-to-peer connection, bluetooth connection, and a WiFi connection.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, the smart home devices such as thermostat communicate wirelessly with the smart hub using Z-Wave ('peer-to-peer connection').</p> |

Complaint, Exhibit 4.

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| | <p>Specs</p> <p>Color: White</p> <p>Size: 4.5" h x 4.5" w x 0.9" d</p> <p>Weight: 10.1 oz (with batteries)</p> <p>Power: 4 AA batteries or 24V AC wired from HVAC system</p> <p>Screen: On-screen control</p> <p>Sensors: Temperature, humidity, proximity, and ambient light</p> <p>Supported Fuels: Natural gas, propane, electric, fuel oil, and geothermal</p> <p>Compatibility: Works with conventional forced air, radiant, and heat pump, with up to 3 stages of heating and up to 2 stages of cooling</p> <p>Connectivity: Z-Wave Peer-to-peer connection</p> <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat (annotated)</p> <p>Pair a thermostat to the panel/hub:</p> <ol style="list-style-type: none"> 1. Unlock the unit's Installer Toolbox from the Site Manager software. 2. From the panel/hub home screen, select the menu icon (...) then Software Version. 3. Use the 4-digit code that appeared in Site Manager after unlocking the Installer Toolbox. 4. Select Smart Home Devices. 5. Select Z-Wave. 6. Select Add Node. 7. On the thermostat, hold the Vivint Smart Thermostat's side button down for about 6-10 seconds (there is a screen that will pop up after 2 seconds, the second Installer screen will pop up at about 6 seconds). <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company</p> |
| [39] The system of claim 32, further comprising presenting | <p>Company provides the system of claim 32, further comprising presenting the at least one digital media file on a display.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, the temperature reading is reflected on the smart hub ("presenting the at least one digital media file on a display.")</p> |

Complaint, Exhibit 4.

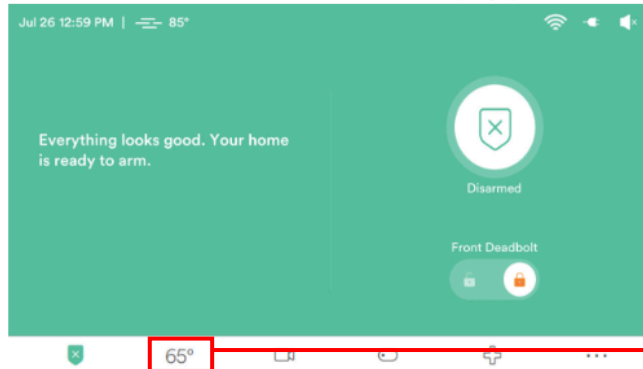
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| <p>the at least one digital media file on a display.</p> | <h2>Vivint Smart Hub - Adjust Thermostat</h2> <p><i>How to adjust the thermostat temperature from the Smart Hub:</i></p> <ol style="list-style-type: none"> 1. From the home screen of the Smart Hub display, press the Temperature display icon on the bottom menu bar.  <p>Source: https://support.vivint.com/article/Smart-Hub-Adjust-Thermostat (annotated)</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company</p> |
| <p>[40] The system of claim 32, wherein the at least one digital media file is provided by the wireless mobile device.</p> | <p>Company provides the system of claim 32, wherein the at least one digital media file is provided by the wireless mobile device.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, the thermostat provides features to adjust the temperature. Therefore, it would be apparent to a person having ordinary skill in the art that the digital media file is provided by the media node.</p> |

Complaint, Exhibit 4.

Vivint Smart Hub - Adjust Thermostat

How to adjust the thermostat temperature from the Smart Hub:

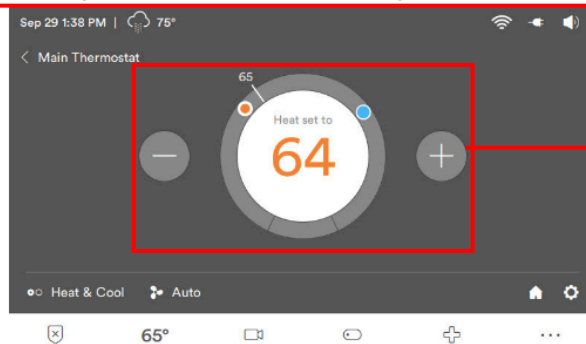
1. From the home screen of the Smart Hub display, press the **Temperature** display icon on the bottom menu bar.



Media file

Source: <https://support.vivint.com/article/Smart-Hub-Adjust-Thermostat>

2. The temperature the thermostat is heating or cooling to will be displayed in the center. The current temperature in the home will be the smaller number on the edge of the circle. If you have more than one thermostat you will need to select the thermostat you want to adjust before you can change any settings.

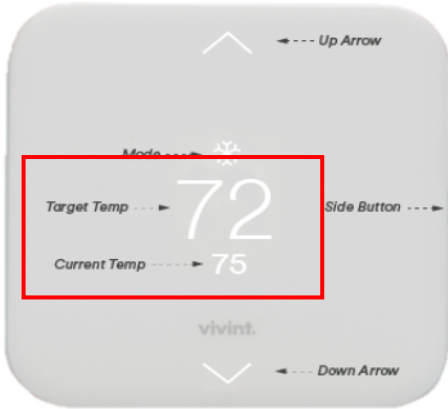


Adjust Temperature

3. If the thermostat mode in the lower left corner is set to **Heat and Cool** you will need to tap on the orange or blue dot to change their temperature settings using the **Plus (+)** and **Minus (-)** icons.

Source: <https://support.vivint.com/article/Smart-Hub-Adjust-Thermostat> (annotated)

Complaint, Exhibit 4.

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| |  <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company</p> |
| <p>[42] A transfer system from transferring a media file over a communication network, comprising a media system; and a wireless mobile device, wherein the</p> | <p>Vivint ("Company") makes, uses, sells and/or offers to sell a wireless mobile device configured to transmit a media file to a media system over a communication network having a security measure.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, Company offers a Home security system which comprises a Smart Hub ("media system") which is paired with smart devices such as door locks, security camera and, thermostat ("wireless mobile device") via Z-Wave Technology ("communication network"). Since the smart hub and the thermostat are fully integrated therefore, the reading on/measured by the thermostat ("media file") is reflected on the smart hub. The pairing procedure between the smart hub and the thermostat indicates a presence of a security measure.</p> |

Complaint, Exhibit 4.

media system
includes:

PROFESSIONALLY DESIGNED ALARM SYSTEMS

Home security systems customized for your home

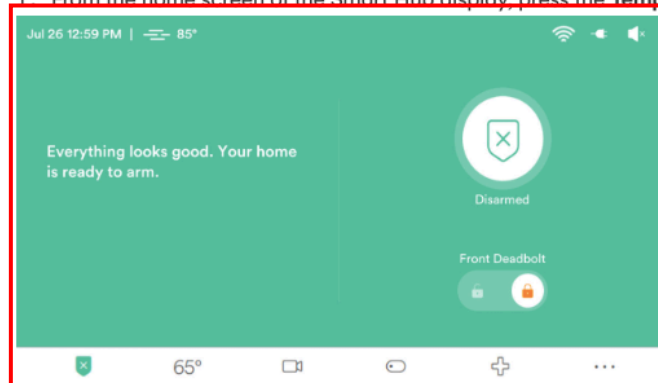
All of our products work together to create a fully-integrated home security system customized for your home. Every door, window, and blind spot is covered.

Source: <https://www.vivint.com/packages/home-security>

Vivint Smart Hub - Adjust Thermostat

How to adjust the thermostat temperature from the Smart Hub:

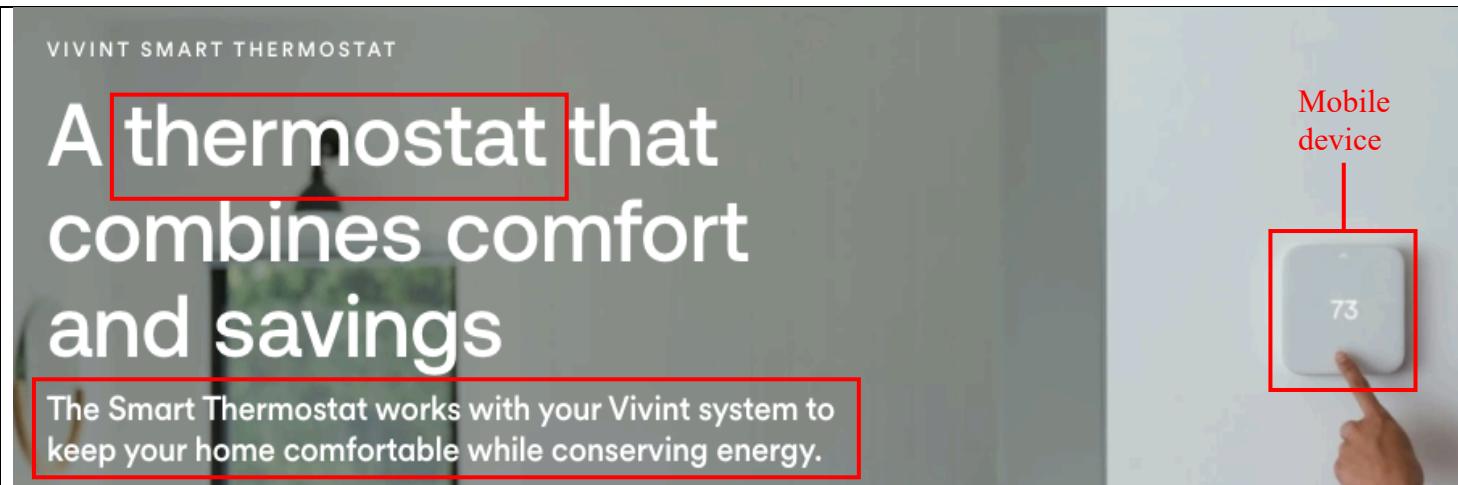
1. From the home screen of the Smart Hub display, press the **Temperature** display icon on the bottom menu bar.



Media System

Source: <https://support.vivint.com/article/Smart-Hub-Adjust-Thermostat> (annotated)

Complaint, Exhibit 4.



Source: <https://www.vivint.com/products/smart-thermostat> (annotated)

Specs

Color: White

Size: 4.5" h x 4.5" w x 0.9" d

Weight: 10.1 oz (with batteries)

Power: 4 AA batteries or 24V AC wired from HVAC system

Screen: On-screen control

Sensors: Temperature, humidity, proximity, and ambient light

Supported Fuels: Natural gas, propane, electric, fuel oil, and geothermal

Compatibility: Works with conventional forced air, radiant, and heat pump, with up to 3 stages of heating and up to 2 stages of cooling

Connectivity: Z-Wave

Source: <https://support.vivint.com/article/Smart-Properties-Element-Thermostat>

Complaint, Exhibit 4.

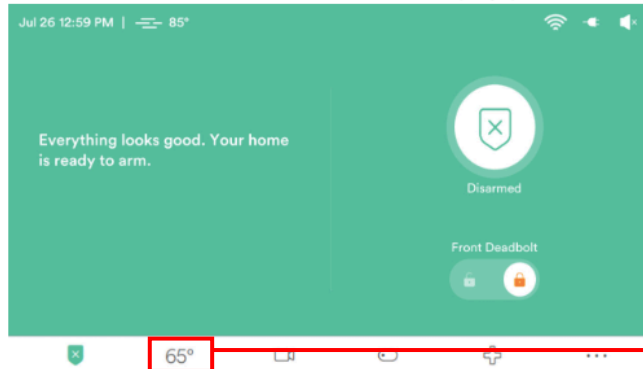
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|---------------------------|---|
| | <p>The Vivint Smart Hub offers integrated, intelligent home automation and communication with smart connected devices* that can be accessed and controlled either directly at the panel or remotely with the Vivint apps.</p> <p>Source: https://www.assets.s3.amazonaws.com/global/vivint.com/Support/images/Vivint_SmartHubV2_GettingStartedGuide_ENU%20-%20revA.2.pdf , Page 13</p> <p>What is a smart thermostat?</p> <p>A smart thermostat, like the Vivint Smart Thermostat, uses built-in features like GPS, in-home sensors, and your personal preferences to automatically adjust your home's temperature. It also integrates with your smart home technology, allowing you to control your temperature from anywhere.</p> <p>Source: https://www.vivint.com/products/smart-thermostat</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p> |
| [42.1] wireless receiver, | <p>a Company provides a wireless receiver.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, the reading on/measured by the thermostat is reflected on the smart hub via Z-Wave network. Therefore, it would be apparent to a person having ordinary skill in the art that a wireless receiver is embedded inside the smart hub.</p> |

Complaint, Exhibit 4.

Vivint Smart Hub - Adjust Thermostat

How to adjust the thermostat temperature from the Smart Hub:

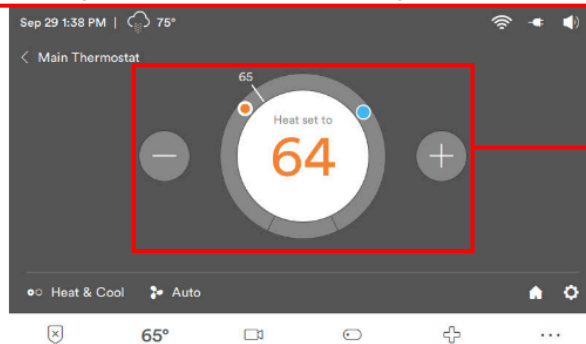
1. From the home screen of the Smart Hub display, press the **Temperature** display icon on the bottom menu bar.



Media file

Source: <https://support.vivint.com/article/Smart-Hub-Adjust-Thermostat> (annotated)

2. The temperature the thermostat is heating or cooling to will be displayed in the center. The current temperature in the home will be the smaller number on the edge of the circle. If you have more than one thermostat you will need to select the thermostat you want to adjust before you can change any settings.

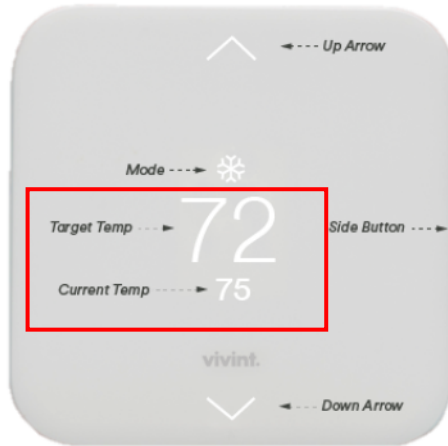


Adjust Temperature

3. If the thermostat mode in the lower left corner is set to **Heat and Cool** you will need to tap on the orange or blue dot to change their temperature settings using the **Plus (+)** and **Minus (-)** icons.

Source: <https://support.vivint.com/article/Smart-Hub-Adjust-Thermostat> (annotated)

Complaint, Exhibit 4.



Source: <https://support.vivint.com/article/Smart-Properties-Element-Thermostat>

Pair a thermostat to the panel/hub:

1. Unlock the unit's Installer Toolbox from the Site Manager software.
2. From the panel/hub home screen, select the menu icon (...) then **Software Version**.
3. Use the 4-digit code that appeared in Site Manager after unlocking the Installer Toolbox.
4. Select **Smart Home Devices**.
5. Select **Z-Wave**.
6. Select **Add Node**.
7. On the thermostat, hold the Vivint Smart Thermostat's side button down for about 6-10 seconds (there is a screen that will pop up after 2 seconds, the second Installer screen will pop up at about 6 seconds).

Source: <https://support.vivint.com/article/Smart-Properties-Element-Thermostat>

Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.

[42.2]
a security
measure; and

Company provides a security measure.

This element is infringed literally, or in the alternative, under the doctrine of equivalents.

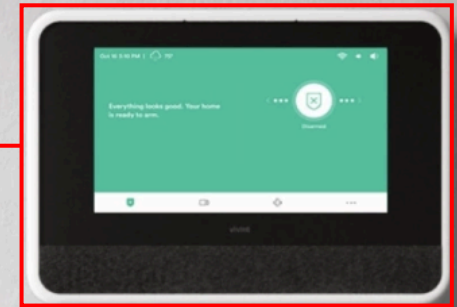
Complaint, Exhibit 4.

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| | <p>For example, to pair the thermostat and the smart hub, ‘smart home devices’ settings followed by “Z-wave” and “Add Node” settings are selected on the hub to pair with the thermostat. Further, when the thermostat’s side button is held for 6 seconds, it becomes detectable for the Z-wave network, and upon clicking the Connect button for the searched network, the thermostat is paired with the smart hub. Therefore, the pairing procedure between the smart hub and the thermostat indicates a presence of a security measure.</p> <p>Pair a thermostat to the panel/hub:</p> <ol style="list-style-type: none"> 1. Unlock the unit’s Installer Toolbox from the Site Manager software. 2. From the panel/hub home screen, select the menu icon (...) then Software Version. 3. Use the 4-digit code that appeared in Site Manager after unlocking the Installer Toolbox. 4. Select Smart Home Devices. 5. Select Z-Wave. 6. Select Add Node. 7. On the thermostat, hold the Vivint Smart Thermostat’s side button down for about 6-10 seconds (there is a screen that will pop up after 2 seconds, the second Installer screen will pop up at about 6 seconds). 8. Go down to Installer. 9. Select Network. 10. Select Connect. <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat</p> <p>Further, to the extent this element is performed at least in part by Defendant’s software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p> |
| <p>[42.2] a processor configured to</p> | <p>Company provides a processor.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, the smart hub receives the information from sensors such as thermostat and allows the user to adjust the temperature accordingly. Therefore, it would be apparent to a person having ordinary skill in the art that a processor is embedded inside the smart hub to process the gathered information.</p> |

Complaint, Exhibit 4.

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| | <p>SMART HOME CONTROL</p> <p>Vivint Smart Hub gives you complete control in your home</p> <p>Watch live camera feeds, close the garage, lock and unlock your doors, or turn on your alarm system—right from the Smart Hub.</p> <p>Source: https://www.vivint.com/packages/home-automation (annotated)</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p> |
| <p>[42.3] the media system disposed in an accessible relation to at least one interactive computer network that has a wireless range structured to permit authorized access to said at least one interactive computer network,</p> | <p>Company provides the media system disposed in an accessible relation to at least one interactive computer network that has a wireless range structured to permit authorized access to said at least one interactive computer network.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, to pair ("accessible relation") the smart hub and the thermostat, the devices must be within a range of 100 meters ("a wireless range structured to permit authorized access") of the Z-wave protocol ("computer network"). Further, Z-Wave network and devices in the Z-wave network are identified with their respective unique IDs. The unique IDs prevents unauthorized devices to access the Z-wave network. Therefore, upon information and belief, the thermostat devices that are within the wireless range of the Z-wave protocol are structured to permit authorized access to pair with the smart hub.</p> |

Media System



Complaint, Exhibit 4.

While Z-Wave has a range of 100 meters or 328 feet in open air, building materials reduce that range, it is recommended to have a Z-Wave device roughly every 30 feet, or closer for maximum efficiency. The Z-Wave signal can hop roughly 600 feet, and Z-Wave networks can be linked together for even larger deployments. Each Z-Wave network can support up to 232 Z-Wave devices allowing you the flexibility to add as many devices as you'd like to make sure your Smart Home is working it's hardest.

Source: <https://www.z-wave.com/learn>

In terms of identification and authorization, each Z-Wave network is identified by a network ID and each end device is identified with a node ID. The unique network ID prevents, for example, one Z-Wave-equipped house from controlling devices in another similarly equipped house.

Source: <https://www.techtarget.com/iotagenda/definition/Z-Wave>

One of the biggest benefits of smart home protocols is they can connect seamlessly to your mobile device or a central control panel like the Vivint Smart Hub.

This means you can use your smartphone or smart hub to do things like arm your security system, adjust the room's temperature, or lock the doors.

Below are some of the most popular smart home protocols:

- Z-Wave

Source: <https://www.vivint.com/resources/article/smart-home-technologies-guide>

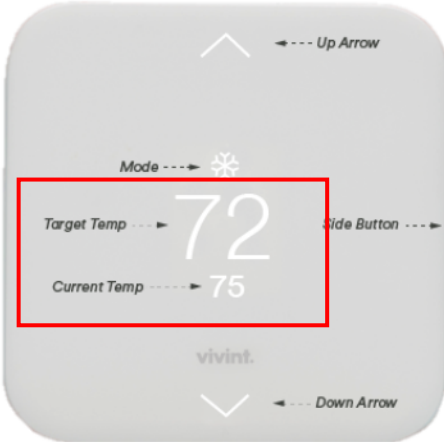
Complaint, Exhibit 4.

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| | <p>Pair a thermostat to the panel/hub: — Media terminal</p> <ol style="list-style-type: none"> 1. Unlock the unit's Installer Toolbox from the Site Manager software. 2. From the panel/hub home screen, select the menu icon (...) then Software Version. 3. Use the 4-digit code that appeared in Site Manager after unlocking the Installer Toolbox. 4. Select Smart Home Devices. 5. Select Z-Wave. 6. Select Add Node. 7. On the thermostat, hold the Vivint Smart Thermostat's side button down for about 6-10 seconds (there is a screen that will pop up after 2 seconds, the second Installer screen will pop up at about 6 seconds). 8. Go down to Installer. 9. Select Network. 10. Select Connect. <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat</p> <p>Specs</p> <p>Color: White Size: 4.5" h x 4.5" w x 0.9" d Weight: 10.1 oz (with batteries) Power: 4 AA batteries or 24V AC wired from HVAC system Screen: On-screen control Sensors: Temperature, humidity, proximity, and ambient light Supported Fuels: Natural gas, propane, electric, fuel oil, and geothermal Compatibility: Works with conventional forced air, radiant, and heat pump, with up to 3 stages of heating and up to 2 stages of cooling Connectivity: Z-Wave</p> <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p> |
| [42.4] the wireless | Company provides the wireless mobile device within said wireless range, wherein said wireless mobile device is detectable by said media system. |

Complaint, Exhibit 4.

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| <p>mobile device within said wireless range, wherein said wireless mobile device is detectable by said media system,</p> | <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, on the smart hub, ‘smart home devices’ settings followed by “Z-wave” and “Add Node” settings are selected on the hub to pair with the thermostat. Further, the thermostat's side button is held for 6 seconds to make it detectable for pairing with the hub (“wireless mobile device is detectable by said media system”).</p> <p>Pair a thermostat to the panel/hub: — Media terminal</p> <ol style="list-style-type: none"> 1. Unlock the unit's Installer Toolbox from the Site Manager software. 2. From the panel/hub home screen, select the menu icon (...) then Software Version. 3. Use the 4-digit code that appeared in Site Manager after unlocking the Installer Toolbox. 4. Select Smart Home Devices. 5. Select Z-Wave. 6. Select Add Node. 7. On the thermostat, hold the Vivint Smart Thermostat's side button down for about 6-10 seconds (there is a screen that will pop up after 2 seconds, the second Installer screen will pop up at about 6 seconds). 8. Go down to Installer. 9. Select Network. 10. Select Connect. <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p> |
| <p>[42.5] at least one digital media file initially disposed on the wireless mobile device, said media system</p> | <p>Company provides at least one digital media file initially disposed on the wireless mobile device, said media system being structured to detect said wireless mobile device disposed within said wireless range.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, the thermostat displays a current temperature and a target temperature (“digital media file initially disposed on the wireless mobile device”) and the same reading is reflected on the smart hub.</p> |

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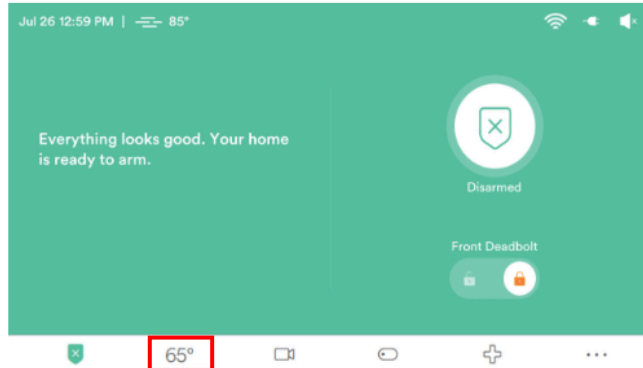
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| <p>being structured to detect said wireless mobile device disposed within said wireless range,</p> | <p>Further, to pair the thermostat and the smart hub, ‘smart home devices’ settings followed by “Z-wave” and “Add Node” settings are selected on the hub to pair with the thermostat. Furthermore, when the thermostat’s side button is held for 6 seconds, it becomes detectable for the Z-wave network (“said media system being structured to detect said wireless mobile device within said wireless range”), and upon clicking the Connect button for the searched network, the thermostat is paired with the smart hub.</p>  <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat</p> |
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Complaint, Exhibit 4.

Vivint Smart Hub - Adjust Thermostat

How to adjust the thermostat temperature from the Smart Hub:

1. From the home screen of the Smart Hub display, press the **Temperature** display icon on the bottom menu bar.



Source: <https://support.vivint.com/article/Smart-Hub-Adjust-Thermostat>

Pair a thermostat to the panel/hub: — Media system

1. Unlock the unit's Installer Toolbox from the Site Manager software.
2. From the panel/hub home screen, select the menu icon (...) then **Software Version**.
3. Use the 4-digit code that appeared in Site Manager after unlocking the Installer Toolbox.
4. Select **Smart Home Devices**.
5. Select **Z-Wave**.
6. Select **Add Node**.
7. On the thermostat, hold the Vivint Smart Thermostat's side button down for about 6-10 seconds (there is a screen that will pop up after 2 seconds, the second Installer screen will pop up at about 6 seconds).
8. Go down to **Installer**.
9. Select **Network**.
10. Select **Connect**.

Source: <https://support.vivint.com/article/Smart-Properties-Element-Thermostat>

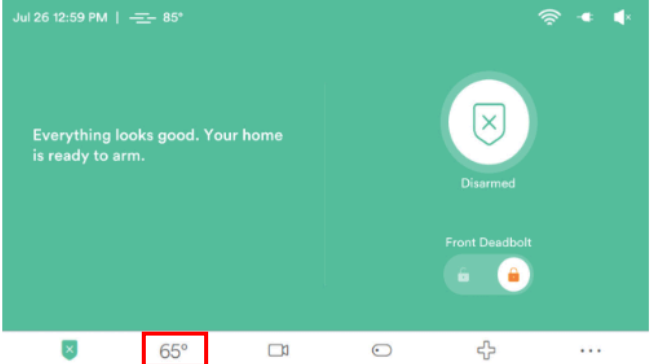
Complaint, Exhibit 4.

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| | Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company. |
| [42.6] a communication link structured to dispose said media system and said wireless mobile device in a communicative relation with one another via said at least one interactive computer network, said communication link being initiated by said media system. | <p>Company provides a communication link structured to dispose said media system and said wireless mobile device in a communicative relation with one another via said at least one interactive computer network, said communication link being initiated by said media system.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, to pair the thermostat with the smart hub, 'smart home devices' settings are selected on the hub. Further, "Z-wave" and "Add Node" settings are selected to pair with the thermostat ("said communication link being initiated by said at least one media system").</p> <p>Further, when the pairing process is complete, a link ("communicative relation") is established between the thermostat and the smart hub via Z-wave protocol ("said at least one interactive computer network").</p> <p>Pair a thermostat to the panel/hub:</p> <ol style="list-style-type: none"> 1. Unlock the unit's Installer Toolbox from the Site Manager software. 2. From the panel/hub home screen, select the menu icon (...) then Software Version. 3. Use the 4-digit code that appeared in Site Manager after unlocking the Installer Toolbox. 4. Select Smart Home Devices. 5. Select Z-Wave. 6. Select Add Node. 7. On the thermostat, hold the Vivint Smart Thermostat's side button down for about 6-10 seconds (there is a screen that will pop up after 2 seconds, the second Installer screen will pop up at about 6 seconds). 8. Go down to Installer. 9. Select Network. 10. Select Connect. <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat</p> |

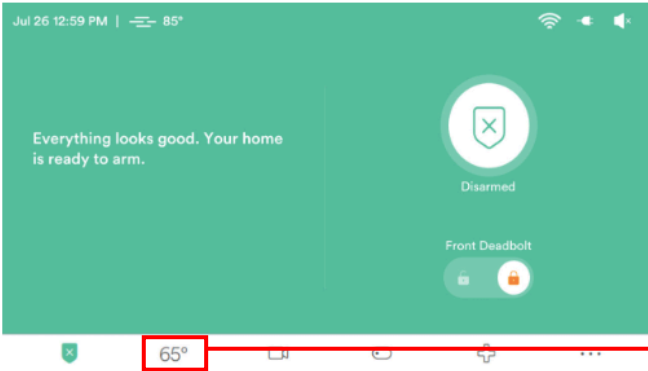
Complaint, Exhibit 4.

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| | <p>One of the biggest benefits of smart home protocols is they can connect seamlessly to your mobile device or a central control panel like the Vivint Smart Hub.</p> <p>This means you can use your smartphone or smart hub to do things like arm your security system, adjust the room's temperature, or lock the doors.</p> <p>Below are some of the most popular smart home protocols:</p> <ul style="list-style-type: none"> • Z-Wave <p>Source: https://www.vivint.com/resources/article/smart-home-technologies-guide</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p> |
| [42.7] said wireless mobile device and media system being structured to transmit said at least one digital media file therebetween via said communication link, and | <p>Company provides said wireless mobile device and media system being structured to transmit said at least one digital media file therebetween via said communication link.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, after the pairing process is complete, the temperature measured by the thermostat, is reflected on the bottom of the smart hub screen. Therefore, it would be apparent to a person having ordinary skill in the art that the thermostat constantly syncs ("transmit said at least one digital media file therebetween via said communication link") the temperature reading with the smart hub.</p> <p>What is a smart thermostat?</p> <p>A smart thermostat, like the Vivint Smart Thermostat, uses built-in features like GPS, in-home sensors, and your personal preferences to automatically adjust your home's temperature. It also integrates with your smart home technology, allowing you to control your temperature from anywhere.</p> <p>Source: https://www.vivint.com/products/smart-thermostat</p> |

Complaint, Exhibit 4.

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| | <h2>Vivint Smart Hub - Adjust Thermostat</h2> <p><i>How to adjust the thermostat temperature from the Smart Hub:</i></p> <ol style="list-style-type: none"> 1. From the home screen of the Smart Hub display, press the Temperature display icon on the bottom menu bar.  <p>Source: https://support.vivint.com/article/Smart-Hub-Adjust-Thermostat</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p> |
| <p>[42.8] said communicati on link is structured to bypass the security measure of the media system for a limited permissible use of the communicati</p> | <p>Company provides said communication link is structured to bypass the security measure of the media system for a limited permissible use of the communication link by the wireless mobile device for only transferring the at least one digital media file to, and displaying the at least one digital media file on, the media system.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, once the devices are paired, a link is established between them, enabling the users to adjust the thermostat's temperature settings directly from the smart hub without the need to regularly pair the devices. As pairing is not necessary each time to make temperature adjustments via the smart hub, it would be apparent to a person having ordinary skill in the art that the established communication link is designed to bypass security measures related to the smart hub. Additionally, the adjusted temperature from the connected thermostat device is reflected on the smart hub as the target temperature ("displaying the at least one digital media file on, the media system.").</p> |

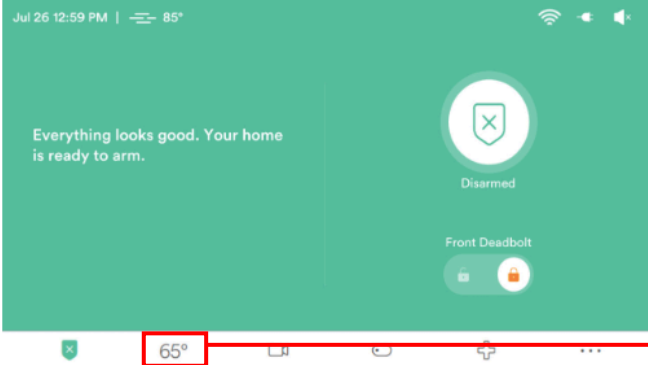
Complaint, Exhibit 4.

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| <p>on link by the wireless mobile device for only transferring the at least one digital media file to, and displaying the at least one digital media file on, the media system.</p> | <p>Pair a thermostat to the panel/hub:</p> <ol style="list-style-type: none"> 1. Unlock the unit's Installer Toolbox from the Site Manager software. 2. From the panel/hub home screen, select the menu icon (...) then Software Version. 3. Use the 4-digit code that appeared in Site Manager after unlocking the Installer Toolbox. 4. Select Smart Home Devices. 5. Select Z-Wave. 6. Select Add Node. 7. On the thermostat, hold the Vivint Smart Thermostat's side button down for about 6-10 seconds (there is a screen that will pop up after 2 seconds, the second Installer screen will pop up at about 6 seconds). <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat</p> <p>Vivint Smart Hub - Adjust Thermostat</p> <p><i>How to adjust the thermostat temperature from the Smart Hub:</i></p> <ol style="list-style-type: none"> 1. From the home screen of the Smart Hub display, press the Temperature display icon on the bottom menu bar.  <p>Source: https://support.vivint.com/article/Smart-Hub-Adjust-Thermostat (annotated)</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company.</p> |
| <p>[47] The system of</p> | <p>Company provides the system of claim 42, wherein the communication link is at least one of a peer-to-peer connection, Bluetooth connection, and a WiFi connection.</p> |

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| <p>claim 42, wherein the communication link is at least one of a peer-to-peer connection, 83 Bluetooth connection, and a WiFi connection.</p> | <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, the smart home devices such as thermostat communicate wirelessly with the smart hub using Z-Wave (‘peer-to-peer connection’).</p> <p>Specs</p> <p>Color: White</p> <p>Size: 4.5" h x 4.5" w x 0.9" d</p> <p>Weight: 10.1 oz (with batteries)</p> <p>Power: 4 AA batteries or 24V AC wired from HVAC system</p> <p>Screen: On-screen control</p> <p>Sensors: Temperature, humidity, proximity, and ambient light</p> <p>Supported Fuels: Natural gas, propane, electric, fuel oil, and geothermal</p> <p>Compatibility: Works with conventional forced air, radiant, and heat pump, with up to 3 stages of heating and up to 2 stages of cooling</p> <p>Connectivity: Z-Wave Peer-to-peer connection</p> <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat (annotated)</p> <p>Pair a thermostat to the panel/hub:</p> <ol style="list-style-type: none"> 1. Unlock the unit's Installer Toolbox from the Site Manager software. 2. From the panel/hub home screen, select the menu icon (...) then Software Version. 3. Use the 4-digit code that appeared in Site Manager after unlocking the Installer Toolbox. 4. Select Smart Home Devices. 5. Select Z-Wave. 6. Select Add Node. 7. On the thermostat, hold the Vivint Smart Thermostat's side button down for about 6-10 seconds (there is a screen that will pop up after 2 seconds, the second Installer screen will pop up at about 6 seconds). <p>Source: https://support.vivint.com/article/Smart-Properties-Element-Thermostat</p> <p>Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company</p> |
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Complaint, Exhibit 4.

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| <p>[49] The system of claim 42, further comprising presenting the at least one digital media file on a display.</p> | <p>Company provides the system of claim 42, further comprising presenting the at least one digital media file on a display.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, the temperature reading is reflected on the smart hub (“presenting the at least one digital media file on a display”).</p> <h3>Vivint Smart Hub - Adjust Thermostat</h3> <p><i>How to adjust the thermostat temperature from the Smart Hub:</i></p> <ol style="list-style-type: none"> 1. From the home screen of the Smart Hub display, press the Temperature display icon on the bottom menu bar.  <p>Source: https://support.vivint.com/article/Smart-Hub-Adjust-Thermostat (annotated)</p> <p>Further, to the extent this element is performed at least in part by Defendant’s software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company</p> |
| <p>[50] The system of claim 32, wherein the at least one digital media file is</p> | <p>Company provides the system of claim 32, wherein the at least one digital media file is provided by the wireless mobile device.</p> <p>This element is infringed literally, or in the alternative, under the doctrine of equivalents.</p> <p>For example, the thermostat provides features to adjust the temperature. Therefore, it would be apparent to a person having ordinary skill in the art that the digital media file is provided by the media node.</p> |

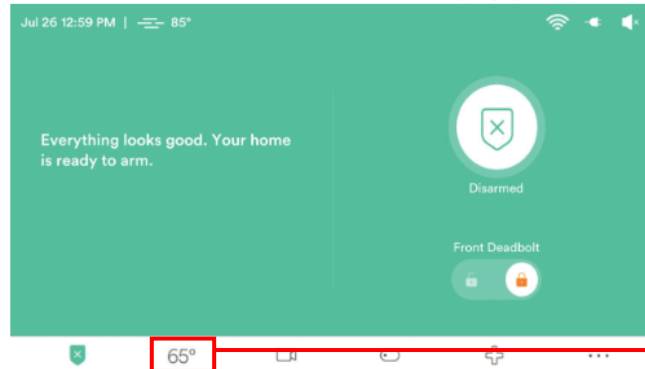
Complaint, Exhibit 4.

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Vivint Smart Hub - Adjust Thermostat

How to adjust the thermostat temperature from the Smart Hub:

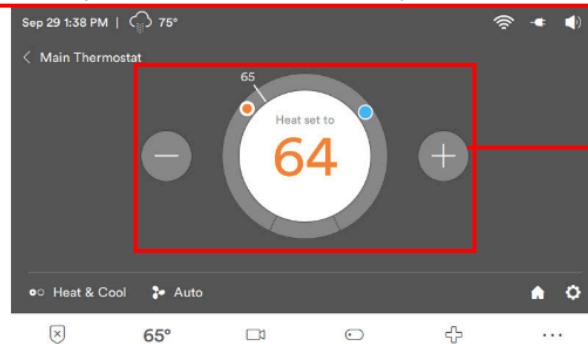
1. From the home screen of the Smart Hub display, press the **Temperature** display icon on the bottom menu bar.



Media file

Source: <https://support.vivint.com/article/Smart-Hub-Adjust-Thermostat>

2. The temperature the thermostat is heating or cooling to will be displayed in the center. The current temperature in the home will be the smaller number on the edge of the circle. If you have more than one thermostat you will need to select the thermostat you want to adjust before you can change any settings.



Adjust Temperature

3. If the thermostat mode in the lower left corner is set to **Heat and Cool** you will need to tap on the orange or blue dot to change their temperature settings using the **Plus (+)** and **Minus (-)** icons.

Source: <https://support.vivint.com/article/Smart-Hub-Adjust-Thermostat> (annotated)

Complaint, Exhibit 4.



Source: <https://support.vivint.com/article/Smart-Properties-Element-Thermostat>

Further, to the extent this element is performed at least in part by Defendant's software source code, Plaintiff shall supplement these contentions pursuant to production of such source code by the Company

Complaint, Exhibit 4.

2. List of References

1. <https://www.vivint.com/packages/home-security>, last accessed on 05th February, 2023.
2. <https://www.vivint.com/products/smart-thermostat>, last accessed on 05th February, 2023.
3. <https://www.vivint.com/resources/article/smart-home-technologies-guide>, last accessed on 05th February, 2023.
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